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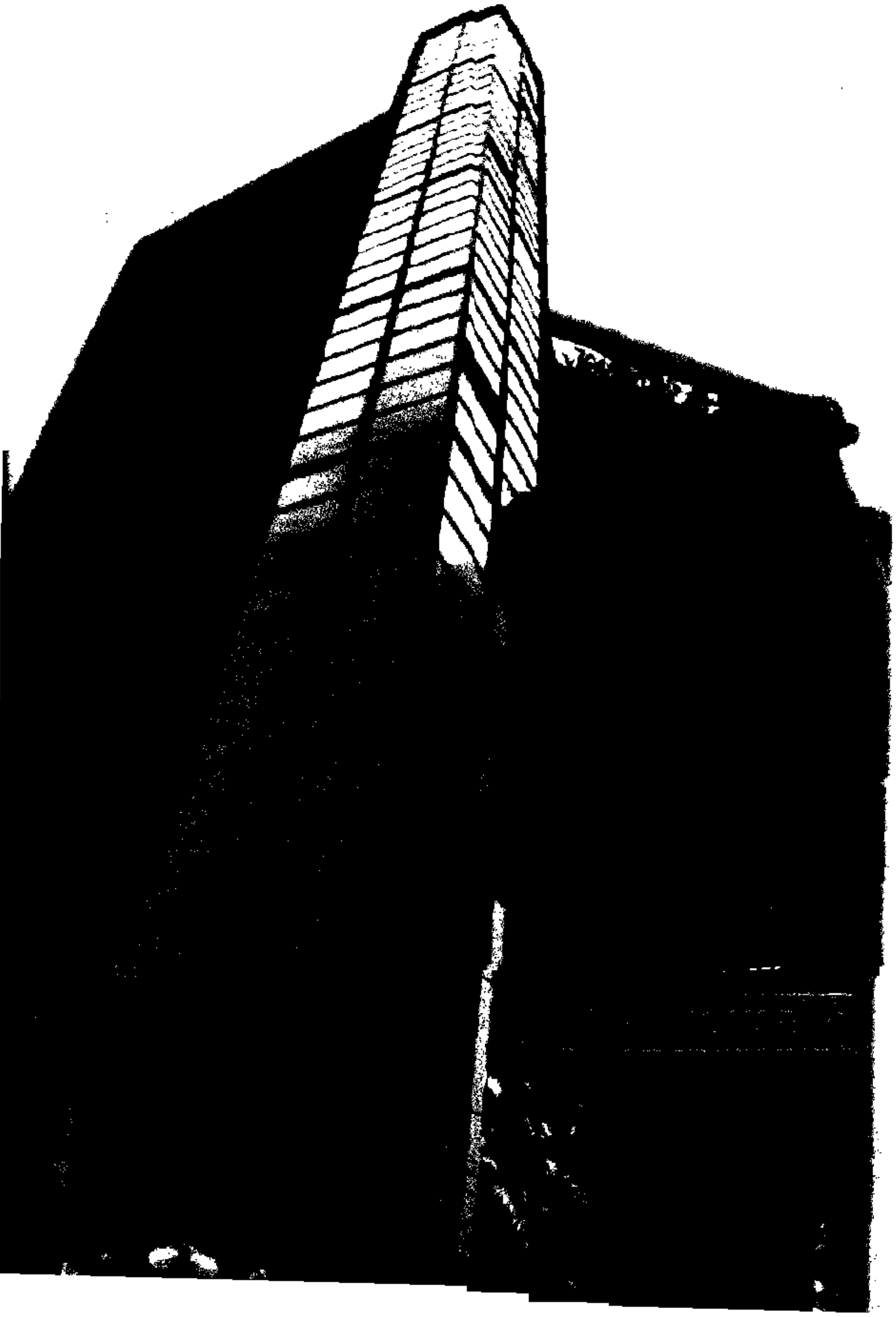

S L Sharma
Rethinking Quality Parameters in Higher Education 1

B K Pal and Harish Kumar Tyagi
Education for Tomorrow: Philosophical Perspectives of Sri Aurobindo 6

Jalaja V and Dineshan Koovakkai
The Problem of Digital Divide among the Academic Community 8

M Masoom Raza
Digital Collection in National Libraries: Challenges and Perspectives Management in Indian Scenario 10

K Venkatasubramanian
Dedication, Devotion and Knowledge 12
—Convocation Address

In this Issue

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IN THIS ISSUE

Rethinking Quality Parameters in Higher Education 1
Education for Tomorrow: Philosophical Perspectives of Sri Aurobindo 6
The Problem of Digital Divide among the Academic Community 8
Digital Collection in National Libraries: Challenges and Perspectives Management in Indian Scenario 10

Convocation

Sikkim-Manipal University of Health, Medical and Technological Sciences, Gangtok, Sikkim 12

Campus News

IGNOU — British Council Roundtable 15
Recent Trends in Global Networking 20

Agricultural News

Study Group Visit to SKUAST-K 21

AIU News

Workshop on Information Technology in University Management 21

News from Abroad

UNIVERSIDAD 2004 23
Theses of the Month 24
Classified Advertisement 30

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Rethinking Quality Parameters in Higher Education

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There has been a phenomenal expansion of higher education in India in the last few decades as is evident from the enormous increase in the number of universities, colleges and students. Little wonder that India has earned the distinction of having the world's second largest education system after China, according to a recent World Bank study. One disconcerting consequence of this indiscriminate expansion, however, has been decline in the quality of higher education. Nothing illustrates it better than the plummeting faith of the employers in the value of the university degrees and diplomas, and the trend of delinking of degrees from job requirement. The irony is that this is happening at a time when we are witnessing the rise of knowledge society, i.e., a society which privileges knowledge. Consequently, our system of higher education is faced today with the challenge of managing quality assurance. The challenge has been rendered even more formidable and inescapable by the entry of educational centres of foreign universities, thanks to globalization and infotech revolution.

In response to it, it is heartening to note the growing concern of the University Grants Commission for building quality assurance in higher education. Several schemes and programmes of quality improvement have been launched by the UGC such as Faculty Improvement Programme (FIP), University leadership Programme (ULP), National Educational Testing (NET), Academic Staff College (ASC), and Autonomous Colleges (AC). Above all, we have the National Assessment and Accreditation Council (NAAC). Except for NAAC, all the other schemes have been in operation for quite some time now, but these have not been able to make more than marginal impact on the quality of higher education. This is so partly because of their bureaucratized and patchy framework and party due to their half-hearted and ritualistic implementation. As a result, we have the paradox of falling standards of higher education and research in spite of multiple schemes of quality improvement. Of the above mentioned schemes, the one that has made its presence felt in a qualitative way is the NAAC. In fact, credit is due to it for generating quality consciousness in a manner as never before in higher education circles. While its positive role in quality assurance cannot but be commended, it may as well be in order to undertake a critical review of its quality parameters.

This essay is designed to review and rethink the quality parameters used by NAAC. The purpose of this piece is not to undermine the valuable contribution of NAAC towards quality enhancement but to reflect on its quality criterion with a view to refining and enriching the same. In pursuit of this end, I wish to advance here a five-point argument. Firstly, that the NAAC criteria of assessment of educational institutions accord more weightage to institutional than to educational context. This is evident from the fact that only three of its seven criteria, i.e., curricular aspects, teaching-learning and evaluation, and research form parts of the educational process while the remaining four pertain to institutional inputs. Secondly, that it follows an aggregative approach which conceals more than it reveals. Thirdly, that its criteria suffer from a significant omission in that they take no cognizance of the academic standing of the institution concerned in the perception of the educational community around. Fourthly, that the indicators that are devised to measure quality of education tend to focus more on the form than on the substance of education, more on the subjective appraisal of the insiders than on the objective appraisal of the outsiders, and more on the cognitive than on the social dimension of education. Finally, that the indicators seem to be derived more from an ad hoc view than a well thought out vision of quality education. In order to advance this argument, the paper is organized into three sections. Section I seeks to analyze the concept of quality based on a scrutiny of the existing approaches to quality conceptualization. Section II provides a criterion of quality education, its dimensions and indicators. Section III attempts to review and refine the parameters of quality devised and used by NAAC.

I

Quality is one of those elusive words which everyone seems to understand but few are able to articulate. For the same reason, it is necessary to specify its meaning before proceeding further. As a term, it has gained currency in at least two circles; i.e. management studies and development studies. In management studies, there are discernible two approaches to quality conceptualization: a) standard based and b) client-satisfaction based. The standard based approach defines quality as compliance with a given standard or approximation to a set benchmark. The popularity of ISO standards as measures of quality assurance is a graphic example of it. Earlier used for products only, now the term quality is applied to services also in respect of both, quality refers to compliance with a credible standard or parity with an acknowledged benchmark.

Having prevailed for some time, the standard based conceptions of quality has now come under scrutiny for its inadequacies. For one thing, it is criticized for its self-limiting character in that a given standard on which it depends is essentially a self-limiting measure. This, it is contended, runs counter to the very essence of quality. By its very nature, quality signifies a self-transcending category. It represents a continuous quest for perfection, an infinite pursuit of excellence. A second limitation of the standard based construct is that it represents a provider's view, with little regard for the client's view. Quality is not always what is projected as quality by a provider. It is also that which is regarded as quality by the customer. It is a pity that in most cases it is the provider's construct of quality that is imposed on the customer, with scant consideration for the customer's vision of it.

The above critique of the standard based construct of quality paved the way to the emergence of client satisfaction based construct of quality. In this conception of quality, the crucial criterion is client's satisfaction, his vision of quality. Applied to the field of education, for example, it is one thing to look at the quality of education from the provider's perspective, while it is another to view it from the client's perspective, that is from the perspective of students, employers and / or community. These two management conceptions of quality are not antithetical to each other. They are indeed complementary and should be viewed as such. Here is an attempt to reconcile the two. For this purpose, it is important to note that quality is a judgmental category. Accordingly, it reflects the worth of a product or a service as professed by the producer / provider and as perceived by the consumer / client. In fact, the two impinge on each other in a manner that is generally mutually balancing.

Turning to the usage of the term quality in development studies articles, there it is generally used in terms of quality of life, which in turn is measured by improvement in life chances of people, their enlightened life styles and their access to civil rights and freedoms. As in the management studies, so in the development studies, the term quality is used to connote a move in a positive direction, i.e. from good towards better. The distinctive point to note, however, is its expanding frontiers, as we move from management studies to development studies: while in the former it has a reference to quality of product and / or service only, in development studies it takes on a wider connotation to cover the quality of life. For present purposes, both the usages of quality, i.e.

management and development, are equally relevant. The former is relevant for assessing the quality of education as a service and the latter for assessing the implications of education for quality of life. Needless to add that quality education is that which enhances quality of life.

II

In a recent report of the International Commission on Education for Twenty First Century entitled "Learning : the Treasure Within", the Commission has identified four pillars of learning, learning to know, learning to do, learning to live together, and learning to be (Delors Commission 1996). This provides a broad vision statement of quality education. Drawing upon it, quality education may be defined as that which transforms the consciousness of a person and leads him from darkness to light. It does so by instilling the following four capabilities in an efficient, effective and excellent manner:

i) to think logically, analytically, critically and laterally;

ii) to eke out an honourable living, i.e. employability by learning occupational skills and work experience;

iii) to realize one's potential for self-development in terms of physical, emotional, intellectual, aesthetic and moral attainment through educational experience; and

iv) to acquire a discriminatory capability to appreciate and imbibe the emerging values of our times such as concern for ecology, equality, civility, harmony and cultural pluralism.

In order to be able to impart quality education, our education system itself has to acquire the following five quality pre-requisites : quality syllabus, quality faculty, quality teaching and evaluation, quality research, and quality character. Some of the indicators of quality syllabus are : its regular updating and upgradation, its advanced theoretical and experimental / empirical thrust, credibility of content, interdisciplinary orientation, sensitivity to emerging intellectual developments and social sensibilities, and above all, relevance for self and social development. Similarly, some of the essentials of quality faculty include their academic and research eminence, intellectual competence as measured by command over the subject, ability to build an argument in a cogent and coherent manner, communicative competence as reflected in clarity of thought and expression and, above all, their creative competence as signified by reflective character of teaching. Likewise, indicators of quality teaching and evaluation are: teacher-student ratio, modes of teaching, its interactive and participatory character, innovative teaching methods, regularity of classes, sanctity accorded to completion of syllabus, students' keenness to attend classes without compulsion of attendance, positive feedback by students, affectivity in teacher-student relationship, regular and continuous assessment, thorough rather than selective (choice-based), mode of evaluation, objectivity, impartiality and transparency in evaluation. In much the same way, measures of quality research are; its evidence of breaking a new ground, generating a paradigm shift, research publications, acknowledgement by way of frequency of citations, awards and honours, quality of research guidance and projects, etc. Last but not the least, the quality of character and outlook of faculty is as important as is the quality of its intellect. In fact, it is this which constitutes the bedrock of quality education. This is so particularly because of the newly recognized role of education as an agency of social change. In this context, the measures of socially relevant quality education are such social sensibilities of faculty as egalitarian, ecological, civil, pluralistic, etc., apart from integrity of character.

III

It will be in order now to undertake a review of the criteria used by NAAC in the light of the above outlined vision of quality education. In this regard, the first thing to note is that the NAAC criteria lend greater value than is due to the institutional over the educational context. This will become clear from a look at the seven criteria that it uses to serve as the basis of its assessment procedures. These are as follows : curricular aspects; teaching-learning and evaluation, research, consultancy and extension; infrastructure and learning resources; student support and progression; organization and management; healthy practices. Clearly, the last four pertain to the institutional support structures while the first three relate to educational quality. For sure, the seven criteria have been allotted differential weightages, as the last four (institutional inputs) together carry

45 per cent weightage while the first three (educational inputs) carry 55 per cent weightage. In other words, it amounts to about equal weightage to both the dimensions, with marginal edge of mere five per cent to the educational dimension. This is certainly problematic both logically and empirically; logically because in assessing the quality of an educational institution education should get pride of the place; empirically because nearly 50 per cent score to institutional context inheres a possibility of yielding a distorted rating of an educational institution. To illustrate the latter, with this kind of weightage structure a resource rich educational institution with poor performance on educational dimension may get a higher score, and thus pass for a better educational institution than the one which is resource poor with higher score on educational dimension. This will be misleading. Hence the need to rethink it.

Closely related to it is the use of aggregative approach or composite index that NAAC employs for determining the rating of an educational institution. It is essential to emphasize here that quality of an educational institution should be assessed primarily in terms of quality of education and only secondarily in *terms of quality of institutional inputs. Quality of* education and that of an educational institution are two different things and the two need to be treated separately. In view of this, use of composite index which combines the two dimensions is irrational on the face of it. In the interest of rational judgement, an educational institution should be rated separately on the two dimensions, i.e., educational and institutional. Better still, criterion-wise ratings on each of the seven components may be even more revealing. Another shortcoming of the aggregative approach is its focus on the institution as a whole. It is possible that a first rate university may have some second or third rate departments while a third rate university may have some first rate departments. As such, there is also a need to initiate the process of assessment and accreditation of the departments within a university and eventually also within a college. It is time to try out disaggregative approach in respect of both, the criteria of evaluation as also the unit of evaluation.

Thirdly, as for the assessment of educational dimension, the one thing that is conspicuous by its absence in the NAAC parameters is the weightage to the academic standing of the educational institution in the public eye. This omission is crucial for two reasons : i) because it may lead to bracketing of two institutions of unequal standing at par; ii) because it may lead to disparity between the NAAC rating and the public rating of the same institution. In fact such anomalies in a few cases have become talk of the academic community. As such, there is a need to give due weightage to the acknowledged academic standing of an educational institution in determining its overall grade.

Fourthly, a look at the NAAC indicators reveals that they focus more on the structural and formal aspects of educational inputs, processes and outcomes than on the substantive aspects. Take, for instance, the indicators of curricular criterion used in the 'Framework for Self-Study' by the NAAC. These include range of curricular options, periodicity of review and updating of the existing curriculum, the mechanism for formulating the curricular content, the extent of incorporation of laboratory work, field work and projects, whether the content is career oriented or academic skill oriented and / or relevant to the local and national needs, and whether it has innovative and interdisciplinary input. While these are *well taken, they leave a lot to be desired. Some of the* significant omissions are : the standard of curricular content, incorporation of the new developments or advances in the discipline of participation of the external experts and internal teachers in designing courses, the quality of their participation, i.e. ritualistic or serious, and above all, mechanisms of monitoring the implementation of the syllabus in the classrooms. The NAAC indicators of teaching learning process pertain to class size, budget provision for labs, modes of students' selection, provision of departmental libraries, bridge courses and availability of distance education programmes. While these are important, they are not adequate. Notably, there is no reference whatsoever to the most crucial aspects of teaching such as the methods of teaching used, the regularity of classes, student's participation in the class rooms and so on and so forth. Similarly, the set of indicators on faculty makes no reference to how the faculty is recruited, how many faculty members are acknowledged scholars in their respective disciplines at the regional, national and international levels, how much concern do they have for the students. The thrust of the NAAC indicators is more on the provisions that the institution has for faculty development than on the quality of faculty per se.

The picture is no different about indicators on research component. The emphasis is on the provision of research facilities and number of teachers and students involved in research. There is no evidence of concern for quality of research in the existing indicators. Nor is there any reference to the recognized research contribution either to theory or to policy made by the institution through its faculty or student research. The point is that the true measures of quality are not incorporated in the NAAC indicators pertaining to research. Overall, it appears that the NAAC indicators on the various criteria pertaining to the educational process are more of quantitative order than qualitative, they seem to be concerned more with the formal requisites than with substantive, more with the provision of facilities than with the quality of their utilization, and more with the quality of infrastructure and financial inputs than with the quality of educational processes and their outputs.

Fifthly, the NAAC parameters are further constrained by the procedural handicap of over reliance on self appraisal. The instrument of self-appraisal has no doubt made a positive impact in that it has stimulated self-introspection. However, as an instrument of rating it has its limitations. For, in a bid to score a high rating the aspiring educational institutions are likely to project themselves in a positive light. The kinds of face validity questions used in the NAAC 'Framework for Self-Study' come in handy for the purpose. Take, for instance, the following questions : "Have there been efforts to restructure the UG courses to make them socially relevant and / or job oriented ?; or, "To what extent the curricular options available are : a) career oriented, b) academic skill oriented, c) made relevant to the local and national needs?" or, "Is there a system of review of academic programmes of the institution besides the Academic Council ?". There is very little likelihood of an educational institution saying 'No' to such questions even if such provisions are not in place. But this is likely to deprive an institution which is really having these provisions of the advantage that is due to it. In short, since the NAAC accreditation is likely to affect the image of an institution vis-a-vis other institutions, the possibility of some institutions manipulating the matters to their advantage cannot be ruled out. Therefore, there is a need to provide for validity check in terms of objective evidence based on the review of curriculum or records of the claims made by the institution or in some other ways.

Sixthly, the NAAC indicators of educational quality are mostly concerned with the quality of cognitive and skill oriented contents than the value content. In these days of market society, the concern of NAAC with the 'employability' potential of higher education cannot be gainsaid. But the neglect of value dimension of education leaves some thing to be desired. In order to appreciate this point, it is necessary to distinguish between instrumental and intrinsic significance of education. The intrinsic significance of education brings to fore the relevance of education for quality of life which is as much shaped by values as by the means of livelihood. Recall here the distinction between management conception and the development conception of quality with the latter providing a more comprehensive conception of quality by means of its concern for quality of life as such. A scrutiny of the NAAC indicators from value perspective reveals a significant void. The NAAC parameters will gain in merit and adequacy if indicators on emerging civil and social sensibilities such as ecological, egalitarian, etc., which are referred to earlier are incorporated into the set.

Finally, in the light of the above, it appears that the NAAC indicators are probably not derived from an informed vision of education. At any rate, even if it is conceded that they are derived from such a vision, the same is not stated. It will help put the indicators of quality education in perspective if the vision is stated in advance. In closing, it needs to be mentioned that as far as institutional inputs of quality education are concerned NAAC has done a wonderful job. It has indeed made commendable contribution towards generating quality consciousness in higher education circles. Its parameters of quality education are also by and large well conceived and devised. There is, however, always a room for improvement in the existing framework. This paper has made a modest attempt in that direction and made some observations which hopefully will receive due consideration in the NAAC organization as well as in higher education circles. It may as well be added that steps may be taken to complement Self-Study Report submitted by an institution with a little more rigorous reality check on the claims made by an institution. This will enhance the credibility of NAAC in the eyes of the academic community as also of corporate and public organizations. ❑

Education for Tomorrow: Philosophical Perspectives of Sri Aurobindo

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The present system of modern education in India has its beginning in the Nineteenth Century. Lord Macaulay could be said to have laid the foundation of the modern Indian education system through his well-known Minutes on Education in February, 1835. His objective was not what we Indians would have desired from an education system. Although the system laid down by Lord Macaulay helped India to have an internationally compatible system of education, it will not be far from truth, if it is stated that it failed to nurture the creative talent of India fully; nor could it tap the latent energies of the youth of this country for national development to the desired extent.

As is well known, the objective of the system of education conceived by the British government for India was to produce a class of intermediaries between the rulers and the ruled. To envisage for the future educated class of a great and ancient country like India, the role of only interpreters between the ruling class and the masses might have been dictated by the imperial interests, and might have well served that purpose, but there is no doubt that it amounted to the stifling of the nation's genius and future, and a negation of human values. Nature tells us one thing that a tree grows from its roots; its strength depends on how deep the roots have gone. Out of ignorance about the great tradition of learning and education in India, Macaulay planted a system of education, which had its roots not in India but elsewhere. The result was the wilting of the tree.

It was to this that Mahatma Gandhi referred to when talking about the education in an independent India, at Chatham House, London on October 20, 1931, he said:

> *I say without fear of my figures being challenged successfully, that today India is more illiterate than it was fifty or a hundred years ago, and so is Burma, because the British administrators, when they came to India instead of taking hold of things as they were, began to root them out. They scratched the soil and began to look at the root, and left the root like that, and the beautiful tree perished.*

In India right from the pre-historic days, highest priority had been given to education. Ancient India considered knowledge as the third eye of the man, which gives him insight into all affairs. While education was available in *Gurukulas* and *Agrahars* throughout the country, the system of education in India also gave birth to the great universities flourished when most of the western world was groping in the dark. Those were the halcyon days when India led the world in scientific knowledge and philosophical speculations, which made a great scholar like Max Müller state:

> *If I were asked under what sky the human mind has most fully developed some of its choicest gifts, has most deeply pondered on the greatest problems of life, and has found solutions to some of them which well deserve the attention of even those who have studied Plato and Kant, I should point to India.*

Had the colonial rulers built on this great tradition of this country in education by introducing modern science and technology into the curriculum, perhaps, our education system could have produced much better results than it had during the last two Centuries or so.

The great contribution of Sri Aurobindo to educational concepts is the integration of the ancient Indian learning with modern thought. This has come out of his integral vision of man. According to Sri Aurobindo:

> *Man in the Indian idea is a spirit veiled in the works of emergency, moving to self-discovery, capable of Godhead. He is a soul that is growing through nature to conscious self-hood, he is a divinity and an external existence; he is an over-flowing wave of the God-ocean, an inextinguishable spark of the supreme fire.*
>
> *For man's true end in life must be always this realization of his own immortal self, this entry in its secret of an infinite and external existence. The Indian systems did not entirely leave this difficult growth to the individual's unaided inner initiative. It supplied him with a framework; it gave him a scale and gradation for his life, which could be made into a kind of ladder rising in that sense. This high convenience was the object of the four Ashramas. Life was divided into four natural periods and each of them marked out a stage in*

> *the working out of this cultural idea of living. There was the period of the students, the period of the householder, the period of recluse or forest-dweller the period of free super-social man, parivrajana. The student life was framed to lay the groundwork of what the man had to know, do and be. It gave a thorough training in the necessary arts, sciences, branches of knowledge, but it was still more insistent on the discipline of the ethical nature ....*

It is evident that Sri Aurobindo accepted and adopted this integrated view of life and education. The four aspects of life, viz., *Artha, Dharma, Kama and Moksha* were given their due places. Knowledge was not for polemics but for wisdom; strength was not for ostentatious and licentious living but for helping others. Consumption was with a spirit of dispassion. These did not remain pious whishes but constituted a way of life of millions including the nobility and the royalty. If the education system which was introduced in 1835 could have been but on the foundations of Indian heritages with an eclectic approach, perhaps India would have been able to contribute much to the post-industrial revolution and saved humanity from much of violence, exploitation and misery.

The educational concepts of Sri Aurobindo have great relevance to India today. All educationists agree that the ultimate objective of education is to produce the complete man. Sri Aurobindo with his mastery of eastern and western thoughts epitomized the complete man. His life itself has been his great message; his enduring contribution to education.

An important element in Sri Aurobindo's vision is the concept or evolution and change. While his philosophy is the re-affirmation of the teachings of the *Vedas*, the *Upanishads* and the *Bhagavad-Gita* in all the richness of their spiritual insight, it reconciles the doctrines of change and permanence; of evolutionism and eternalism and of mysticism and monadism. It naturally follows that the system of education also has to change to meet the needs of the evolving man. The system of education of yesterday may not meet the requirements of tomorrow. It has to adapt itself to the times. This idea comes out dearly even in his early writings. In the early phase of the freedom movement, commenting on *Swadeshi* in education, he writes, "It means an education suited to the temperament and needs of the people fitted to build up a nation equipped for life under modern conditions". Sri Aurobindo was definitely not for a static system of education.

It is equally relevant in the context of education for tomorrow to remember that while stressing that India can best develop her and serve humanity by being her and following the law of her own nature, Sri Aurobindo points out:

- *This does not mean the rejection of everything new that comes to us in the stream of time or happens to have been first developed or powerfully expressed by the West. Such an attitude would be intellectually absurd, physically impossible and, above all, unspiritual; true spirituality rejects no new light, no added means or materials of self-development. It means simply to keep our cento, our essential way of being, and our inborn nature and assimilate to it all we receive, and evolve out of list all we do and create.*

Sri Aurobindo also realized the limitations of formal education. It alone was not sufficient to make the complete man. He says:

> *But it has not been found in experience whatever might have once been hoped, that education and intellectual training by itself an exchange man; it only provided the human individual and collective ego with better information and a more efficient machinery for its self-affirmation, but leaves it the same unchanged human ego.*

A concern expressed by many about present day education is its alienation from spiritual and cultural values. It is increasingly being realized that education of tomorrow has to be moored in ethical principles and spiritual values. These are the ideas, which Sri Auronbindo has been stressing throughout his life and in all his writings. We definitely have much to incorporate in our education system from the teaching of Sri Aurobindo.

The educational doctrine of Sri Aurobindo is closely linked with his futuristic vision of human destiny. In his philosophy, it is the future, which shaped the past tryst with the ocean is the future of the river, and the river's course is dictated by it. Human destiny is an ascent towards the Super mind, towards realization of the Godhead. This is natural evolution from a state of ignorance. That is why Sri Aurobindo says that the first thing a teacher must know is that nothing can be taught. Every child is a unique being. Each child is a seed with real wisdom embedded in it; it has to grow in a natural and spontaneous way. The teacher is only a nursemaid to the nurturing of the talent of the child. Sri Aurobindo's writings adumbrate the modern concepts of child centered education and of learning as a joyful experience, which we are trying to put into practice. May be the education of tomorrow will be such. We of today can but hope and aspire that tomorrow's education will produce better human beings. As the Mother said, "Go on aspiring and the necessary progress is bound to come". That is a message of hope for all of us. ❑

The Problem of Digital Divide among the Academic Community

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Information is a fundamental resource indispensable for any academic activity. The role of information in study, teaching and research is well recognized by the academic community. The revolution in the information and communication technologies (ICTs) has made the transfer of information so easy that any body in any place can share information without geographical barrier. The new ICTs have enabled the academic community to overcome the barrier of time in accessing information as well.

At the same time information is dynamic in growth and infinite in quantum. The dynamic growth and abundance of information on the one hand and advancement in computer and communication technologies on the other paved the way for the growth of electronic form of information.

Need for Digital Information in the Academic Field

In the present day information society, literacy means, computer literacy. Even the marginally 'literate' people will not be able to survive and compete in the academic field today (Rai, 2002). With the exponential growth of digital information, Internet is becoming the most important source of information. The Internet has emerged as a boon to the academic community by facilitating access to a treasure of information on the web which can be used for study, teaching and research. It is a source of current information generated all over the world. For the publication of the research output also Internet can be effectively used by the academic community. The academics use the Internet for knowing a subject and updating their knowledge as well. The researchers can obtain the related literature in their field of study by browsing the Internet. The Internet is also widely used in teaching-learning process and for career search. Thus Internet provides the academic community great amount of information as well as facilities for imparting knowledge. However, to utilize the potentials of Internet to its maximum, it is necessary to make the academics well versed in using it.

The academics, especially researchers, need various types of databases both off-line and on-line. These databases provide the researchers required information in conducting their researches. The developments in computer and communication technologies have given rise to the large scale availability of such databases.

Various electronic resources such as e-books, e-journals etc. are also widely available in the present time with the advancement in electronic publishing. Many journals are now available only in the electronic form. Accessing such resources is inevitable for the academic community to update their knowledge.

The Digital Divide

The revolution in ICTS and increased use of digital resources have resulted into the division of society into information rich and information poor. As a result of the difference in opportunity to access information, the society will be segregated into haves and have nots. This is popularly known as digital divide. There exists a gap between those with ready access to the tools of ICTs and those without such access or skills. Culler (2003) is of the view that many factors - socio-economic, geographical, educational, attitudinal and physical-result into the creation of this gap. Those who do not have access to ICTs will be increasingly disadvantaged in their access to information.

Van Dijk and Hacker (2003) explain four types of barriers to access the digital information which cause digital divide. The four barriers according to van Dijk are: mental access, material access, skill access and usage access. These barriers have implications on the academic community as they make the academic community digitally divided.

Mental Access

This barrier is caused by the attitude of the society towards ICTs. Lack of interest, computer anxiety etc. will lead to non-use of the digital information. In the Indian situation, even the academics are reluctant to use the digital resources due to their negative attitude to ICTs. Those who do not use the digital resources due to this approach will be the disadvantaged when compared to their counterparts using such resources.

Material Access

Non-availability of computer and network connections also will cause digital divide. In the Indian situation, the ability to purchase or rent the tools of access to digital information is less among the community. The low income group among the academics will be deprived of the opportunity to go to cyber cafe or to get an internet connectivity on their own for accessing digital information.

Skill Access

Lack of skill in using the computer and communication equipment prevents a group of people in accessing the digital information. In India, most of the users of information in the academic field are not trained in using the tools of ICTs. Those who have such skills will get the advantage of the developments in information communication using electronic equipment.

Usage Access

Lack of significant usage opportunities will create a usage gap among the academic community. This is due to the usage of ICTs by a group for their work and education while the other group is using ICTs for entertainment alone.

The problem of Third World Countries

In the third world countries like India, the use of ICTs is limited. In the advanced countries like the USA, more than half of the population use internet while the rate of internet use in India is negligible. Low income, low literacy rate, unemployment, non-availability of the ICTs etc. are the reasons for the low level of the use of digital resources in India. Hence only a very few in India are information rich even among the academics.

Changing Concept of Free Information

The concept of free information is changing with the increase in digital resources. The digital resources are not usually provided free of cost. For accessing digital information either through Internet or using databases usually needs to pay a price. In a country like India where the income level of the majority of the people is low, accessing information by paying a fee is not always possible. The worst affected party in such case will be the academics who need vast amount of information. The inability to pay for the information will create an information poor group. Those who are able to pay alone will get the benefits of the developments in information and information dissemination technologies. Thus digital divide is more visible among the academic community where the rich will become information rich as well and the poor will become information poor also.

How to Solve the Problem ?

Solving the problem of digital divide is not so easy. There must be change in the attitude of the academics towards the ICTs and digital information. Though providing digital information free of cost is not always possible, a cost based service is feasible in the Indian context. It is the duty of the government as well as the academic institutions to ensure provision of the required digital information to the academic community either free of cost or by charging a reasonable price.

Role of Libraries

Libraries, with their commitment to freedom of access to information and promotion of life-long learning have an important role to play in closing the digital divide (Cullen, 2003). Most of the university libraries in our country have Internet connectivity. However, the whole academics are not getting the benefits from this. More liberal approach on the part of the Universities is required in providing such service to the whole academic community. The facilities for accessing databases also should be strengthened in academic libraries. Most of the College and School libraries are still poor in the provision of information using ICTs. These should be strengthened in order to make the students, teachers and researchers information rich.

Conclusion

Though the ICTs provide better access to information, their use is limited among the academic community. Those who are not utilizing the facilities of ICTs are deprived of the opportunities of accessing ever changing information with greater speed. Libraries have a special role in providing information to all in order to reduce the gap between those who have facilities to access digital information and those who do not have such facilities. Though the digital divide is a global phenomenon, it is more acute among the academic community in developing countries like India. The emergence of information rich and information poor groups will create serious social problems, which will ultimately lead to denial of opportunity to the poor in all respects.

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Digital Collection in National Libraries: Challenges and Perspectives Management in Indian Scenario

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The concept of national library has developed mostly in the industrial countries of the west. The growth and development of such libraries has been a conspicuous future of the intellectual and cultural development of a country. The national library plays the role of depository and repository of India's cultural heritage as well as the main bibliographic center within the orbit of this system.

The constitution of India provides for the establishment of the national library under the article 62 of the VII schedule of the union list. The national libraries serve as a permanent repository of all reading and information material produced in India, as well as printed material written by Indians and concerning India written by foreigners wherever published and in whichever language. It receives all published materials in India under the Delivery of Books (Newspaper) Act 1954 (D.BAct) as amended in 1956. The technological advancement accompanied with global influence of information technology has drastically effected the routine task of national libraries to a greater extent. It has effected publishing, acquisition, storing and dissemination services of any library. It would be appropriate to use the term "digital service" to encompass the use of electronic services designed to improve access to traditional library collection as well as digital collection.

The techno-savvy clients require information at fingertips within no time. Obviously the technology has made it easy for us to do that, but certainly things have to be planned and executed properly. The national libraries are faced with two major problems right at this juncture, first is to isolate the documents of active use and digitise it so that most of users can have advantage of it. Secondly the acquisition, storing and maintenance of digital collections. The digital collection may include two types of information resource. One type comprise the "the digital original resources" which are referred as a resource which are "born digitally" The other type comprises '-'digital surrogates' which are created from traditional information resource through format conversion. While both type of resources have the same access and management requirements, they raise different issue of selection and acquisition, and their preservation imperatives are also different. This paper will be confined to challenges and services, which are based on digital materials.

Challenges for National Libraries

The following are the challenges for national libraries, which arise from the rapidly expanding world of digital publications:

- The challenge of selecting significant national publications;
- The challenge of acquiring efficiently those digital publications, which are selected;
- The challenge of integrating access to digitized and non digitized collection of original heritage materials,
- The challenge of constructing metadata infrastructure to support access to nationally distributed digital collection;
- The challenge of ensuring reliable delivery of digital publications in a distributed environment given their changeable physical location;
- The challenge of reaching agreement with publishers on reasonable access condition for digital publications received on deposit;
- The challenge of managing and controlling these access conditions; and
- The enormous challenge of preserving digital publications, which is of particular importance for those publications "born digitally".

These challenges are to be examined in the context of the library processes of selection, acquisition, bibliographic control, access control and preservation.

Selection of Digital Collections

National libraries have a responsibility to collect and preserve the nations information resources, in all formats. In doing this, they must take account of expanding world of digital publications, particularly given the rapid development of www since 1993. The high cost of publishing in traditional formats has meant that publishers have effectively undertaken a filtering role, selecting only quality works, or on those with high market appeal, from the many authors to find an alternative, lower cost, publishing channels. At least for national libraries, this presents a significant challenge in identifying and selecting the publications to be preserved and in identifying these in the absence of traditional selection tools and illegal deposit provisions. The guidelines for selection can be the content, authoritative status, research value, quality control process, public interest in the subject matter and indexed by a recognised indexing service. Under these circumstances, it is necessary to distinguish between selection for current access and preservation for future access. In the first case, the library does not need to collect the object, but only provide the means for discovery and access. In the latter case, the library must either collect the object and take responsibility for its ongoing access through technological change, or make sure that some other institution has taken responsibility of this.

Acquisition of Digital Collections

The digital collection may be built through either or both the process:

(i) Digital documents my be created by digital conversion of existing printed or other analogue materials;

(ii) Existing digital documents my be gathered from the web or from digital sources such as CD-ROMs;

The digital conversion process is costly because of labour involved both in processing time and in project management. It is a process which requires careful planning to ensure that the full informational value of the original material is preserved. Microfilming and OCR scanning techniques are use to improved search access to digital surrogates. Another method of acquiring documents, which are already in digital form directly from the web. To preserve fidelity to original resource, it is necessary that the archive copy should replicate the structure, file names and internal links of the original resource, in parallel form. On the other hand, links to external resources, will need to be disabled and replaced by a suitable message, unless these external resources have also been archived or continue to exist unmodified with permanent names.

Control and Access of Digital Collections

The digital publications have created following challenges for national libraries:

- How to integrate access to digitized and non-digitized collections of original heritage materials;
- How to support the navigation through the levels of information resource in a collection, or within a collection item;
- How to construct metadata infrastructures to support access to nationally distributed digital collections;
- How to ensure reliable delivery of digital publications given their changeable physical locations;

Metadata is the key to integrating access to digital and traditional collections. A user often needs to discover information resource all formats relating to a given subject. Service such as "Subject Gateways" have been developed to support access to quality information resource on the web.

One potential barrier is to integrated access is the divergence of metadata standards between the world of traditional publications (based mainly on the AACR2 and MARC standards) and the world of digital publications (based on Dublin Core or the other non MARC standards). The Dublin core metadata standards provide a kind of "lingua franca" with the potential to integrate access to the digital services of libraries with those of institution such as museums and archives, with access to the wider universe of web-based resources. The distributed metadata is quite problematic for both traditional and digital collection, as user have to navigate up or down though the levels of a collection. A digital service my attempt to support integrated access to diverse categories of information resources or to resource from diverse sources. The more diverse these categories or sources, the more likely it is that a centralised model (based on uniform metadata standard) will be required, because the less likely it is that there will be sufficient alignment of the entire set of protocols that are needed to support the fully distributed approach.

Controlling the use of Digital Collection

Commercial publishers increasingly make use of the web as a publishing medium, important issues are raised in the relationship between publishers and librarians, including national library. For these reason, libraries must deal with the challenge of reaching agreement with publishers on reasonable access condition for digital publication, including those received on deposit. The access conditions involve a wide range of option.

- The digital item is accessible only within the library building or campus. I. The digital item can be accessed by only one reader at a time.
- A license fee is to be paid, which permits a given number of readers to access the digital item at the same time.

(Contd. on page 14)

Dedication, Devotion and Knowledge

K Venkatasubramanian, Member, Union Planning Commission, New Delhi delivered the Convocation Address of Sikkim-Manipal University of Health, Medical and Technological Sciences, Gangtok, Sikkim on October 11, 2003. He said, "India's progress over the next 20 years will be intimately linked to events within the region as well as around the world. Both opportunities and challenges will arise as the result of transformation in the regional and global political and security environments. World trade under WTO will determine access to markets and international competitiveness, particularly after the ascension of China. The economic growth rates of other regions will influence demand for exports and foreign capital flows. Some other developments that will influence India's progress in the coming two decades are: pressure on energy prices as a result of global economic growth; continued spread of the information revolution; and technological innovations, such as those with regard to disease prevention and treatment". Excerpts

While we take pride in our technological gains, we cannot ignore that we have the world's largest concentration of poor people, that nearly 300 million Indians struggle without the basic necessities of life and that we have the world's largest number of malnourished children. Millions have no clean water nor have access to proper health services. This sorrowful list is long and it will be a crime against humanity if we ignore this depressing realities.

I recall here that our Prime Minister Shri Atal Behari Vajpayee insisted on ringing Human Well Being (HWB) while launching the Tenth Five Year Plan. HWB simply means education and health primarily. And Engineers are in charge of the infrastructure sector, which will ring in these two benefits, and it is the foundation sector for growth so to say.

In the early 1950s, nearly half of India's population was living in poverty. Though slowly, income poverty in India has been declining. However, vast disparities in per capita income levels between and within India's States persist. While these indicators illustrate achievements in a challenging environment, India's social indicators remain weak by most measures of human development analysis.

The operative word today is quality and we should produce engineers of high quality with a rare sense of dedication. In view of the importance of infrastructure as a critical input for human development there should be a continued commitment to provide housing, connectivity, water ways, small and big dams etc. which all come under the purview of engineering.

As such we cannot under-estimate the role of the engineers in development. They have to rebuild the nation. Our rural areas are lacking in human shelter. Similarly our schools have no buildings, people have no connecting roads and these areas need immediate attention. It is the duty of Engineers to attend to these infrastructural needs to make India strong to take her place in the comity of Nations.

The Indian engineers are held in high esteem throughout the world but unfortunately quite a few of them after finishing their studies in top institutions like IITs fly away to foreign lands.

David H Peters of the World Bank argues for better infrastructure to develop India's poor. According to him the main objective of the infrastructure development should be to improve the status of the population, protect them against the financial risks and to create a system that is responsive to the needs and demands of the people. He categorically highlights the urgent need for reforming the rural sectors in India.

It is a matter of great pride for all of us that Indian technologists have proved their excellence globally, including in developed countries. In the field of medicine, 38 percent of the top specialists in the USA are of Indian origin. In the UK one third of the general practitioners of medicine belong to Indian origin. Similarly Indian engineers are everywhere. Our IITs are held in very high respect by countries abroad. One statistics say that but for Indian Engineers, who are more than 40% these modern nations cannot march with speed.

It is also very unfortunate that most of the graduate doctors and engineers are unwilling to serve in rural areas and have created a situation of unsustainable urban concentration. I would urge my young friends here that, in the pursuit of their career, they should never forget that this noble profession of engineering enjoins that very high moral and ethical standards are to be followed. I hope you will all uphold them in the best of tradition set by Indian technologists for ages.

I repeat again that our engineers should take up to infrastructure development of the country with priority. The Planning Commission has gone indepth on this in their Vision Document 2020.

Disparities in infrastructure between large and small urban areas have always been prevalent, but these disparities can be expected to increase significantly in future years. The stricter fiscal disciplines imposed by government and credit rating agencies will make it increasingly difficult for all but the largest urban centres to attract finance for infrastructure development. The large cities may be expected to experience modest to high" rates of growth and to absorb a large part of the incremental migration in their peripheries and neighbouring towns. Being linked to the national and global economy, these areas are likely to attract investment from the corporate sector and experience a stable demographic growth, while small and medium towns, particularly in backward regions, attract little industrial and infrastructural investment and report low and unstable demographic growth. This almost exclusive focus on improving infrastructure and basic amenities in the large cities is misplaced. Still greater inequality may be expected in the level of basic services across urban centres of different sizes by the year 2020, unless concerted initiative is taken to reverse the trend.

The gross inadequacies of infrastructure, especially those of public transport, water supply and sanitation, demand corrective action. A strategy for developing capabilities within the urban local bodies to cope with the infrastructural deficiencies must be adopted, with genuine decentralisation of financial and administrative powers and restructuring of the entities on the basis of sound management practices.

India's progress over the next 20 years will be intimately linked to events within the region as well as around the world. Both opportunities and challenges will arise as the result of transformation in the regional and global political and security environments. World trade under WTO will determine access to markets and international competitiveness, particularly after the ascension of China. The economic growth rates of other regions will influence demand for exports and foreign capital flows. Some other developments that will influence India's progress in the coming two decades are: pressure on energy prices as a result of global economic growth; continued spread of the information revolution; and technological innovations, such as those with regard to disease prevention and treatment.

In this global scenario the role of the engineer is paramount and they are to hone our infrastructure to heights so that we can be equal to the other countries in the world. India's technology policy needs to be reformulated in the light of the emerging international economic environment, to capitalise on the accelerated-global development and diffusions of technologies, and keep pace with more demanding international standards for cost, quality and productivity. India will need to be far more aggressive in acquiring and applying advanced technologies in a wide range of fields, including agriculture, information technology, energy, health and education. At the same time, India can also aspire to become an important contributor to the expansion of global frontiers of technology by building upon and leveraging its already significant achievements in fields such as pharmaceuticals, biotechnology, software, space and energy. It can also revive, simultaneously, its traditional knowledge and technologies through formal R&D efforts.

The Engineers India has prescribed a code of conduct for engineers of *Bharat*. One item of this, which I liked most, is, I quote "An engineer shall always feel that he is the creator of a new world and hence will always place his talents at the service to build the country".

The population of Indian students in the US registered a growth of 22 per cent in 2002, despite the September 11 attack. And, it is not only just America, the number of Indian students is on the rise at all major educational (Co destinations in the world like the UK, Australia and even emerging destinations like Canada, Germany and France. An education survey done by IDP Education Australia indicates that India and China will dominate world education in years to come. Indians and Chinese will constitute around 50 per cent of the total number of students going for higher education in a couple of decades. Prime Minister Shri Atal Behari Vajpayee said that new Century will be an Indian Century. We are running a race with China the winning *Mantra* for us is Dedication, Devotion and Knowledge.

There are four types of revolutions. Green revolution that relates to agriculture, White revolution that relates to milk, Blue revolution that relates to space mission and the most important is the Grey revolution that relates to the emerging significance of knowledge management. But the problem in India is not the lack of a sophisticated and knowledgeable workforce, but the lack of an application-oriented approach, which should be the main aim of the Institute of Technology.

When we take stock of our premier engineering and science institutes in India we find as a result of globalisation our industries are maturing at a fast rate and hence fell the need to invest in research and development. The Industries today are keen to take the help of IITs. Therefore the key institutes of technology should plunge into research projects, as research is more essential than mere teaching.

Speaking at the Asean Business and Investment Summit at Bali, Indonesia, recently, our Prime Minister Shri Atal Behari Vajpayee dwelt on the 'many strengths' of 'the India of the 21st Century'. They include:

- *An inherently strong economy driven primarily by indigenous skills and domestic enterprise.*
- *A growing and accessible domestic market, with import and investment barriers falling away.* In the last few months, it had been absorbing about 20 lakh mobile phones a month. Import duties were moving towards Asean levels, and sectoral caps on foreign investment were rising.
- *A rich pool of human resources - English speaking, with R and D skills, technological training and managerial capabilities.*
- *Some special capabilities in modern technologies.* India was one of only three countries - the others were the US and Japan - to have indigenously designed and manufactured supercomputers. It was one of only six countries, which could build and launch its own satellites.
- *Global leadership in technologies of the knowledge economy.* The country's pre-eminent position in IT and IT-enabled services had led global companies to set up captives in India or to out-source their operations to quality Indian service providers.
- *A sound and transparent financial system, with well-managed banking and insurance sectors, and vibrant capital markets.* The paperless, computer-driven National Stock Exchange was the third largest in the world, in terms of number of annual transactions.

These six areas of strength have to be canalized by our Universities and Institutes of Technology. It is a challenge, which our students should take up. And, I am sure the Manipal Engineers will be in the forefront in this task.

India is in the throes of shaping herself as a Super Knowledge Power as predicted by our beloved Rashtrapathi, Dr APJ Abdul Kalam and in this sphere the role of the engineer is paramount.

I wish the new engineering graduates all good luck and God speed in all their future endeavours to take *Bharat* to heights. ❑

(Contd from page 11)

- A royalty fee is to be paid each time a work is printed or copied, or possibly even each time it is viewed.

For institutionally based users, this problem can be addressed in part through the use of license agreements for access to the commercial services, so that the user could effectively search these services and free web resources through a common subject gateway.

Preservation of Digital Collections

The preservation implications in libraries, both in terms of managing digital information coming into our collections, and in the terms of using digital imaging techniques as a preservation tool that might help in the managing analogue collections. The world of changing websites, unstable floppy disks and individual computer system is not a safe place for any digital resource. The practical things for the long-term preservation of digital resource:

- Building the technical infrastructure and procedures for archiving.
- Establishing mechanisms for recording the metadata.
- Developing persistent naming convention for digital resource.
- Moving digital resources from less stable carriers like floppy disks to more stable carriers like CDs.
- Identifying format, which permits migration (in which the data is migrated, if technically feasible, to new operating systems and data structure) or emulation (in which modern computers emulate the operating systems and data structures of previous eras)

Conclusion

The emergence of the word wide web in 1993, and its rapid development thereafter, has allowed developers to provide universal access to digital collection. Access through the web is based on open standards (Hyper-text transmission protocol) and on widely available browser software, which can be used from anyone's desktop computer. The problem of content storage, content delivery, control and access, printing and authentication are some of the grave issues, which need immediate attention. However, the upcoming technological solution addresses to all the issues from digital subscription, digital content evaluation, digital security, digital liscencing to digital delivery of content. So, it is better to embrace this upcoming technological advancement as for having faster, efficient and multiple access to bibliographic as well as full text information. This paradigm shift will transform the national libraries to global, multilingual repositories of data, knowledge, sound and images. ❑

CAMPUS NEWS

IGNOU — British Council Roundtable

The Indira Gandhi National Open University, New Delhi and the British Council, New Delhi collaboratively organized a half-day roundtable recently at British Council, premises for the heads of staff development and online learning of higher and further education institutions located in Delhi. The objective of the roundtable was to discuss the possibility of Staff Development through e-Learning in Indian higher education institutions. Dr. Rachel Forsyth of Manchester Metropolitan University, UK facilitated the discussion in which participants from leading institutions of Delhi shared their views and perceptions about e-Learning. Participants in the roundtable included institutions like, Indian Institute of Technology, Indian Institute of Foreign Trade, Jamia Millia Islamia, The Energy Research Institute, National Institute of Fashion Technology, National Council for Educational Research and Training, and IGNOU. The roundtable was coordinated by Ms. Kanta Vadehra, Manager of Educational Programmes of British Council, and Prof. Santosh Panda, Dr. Sanjaya Mishra and Dr. Madhu Bala from IGNOU. The roundtable was visualized as a step towards further institutional collaboration and networking for professional development and R&D through the web.

M. V. Pylee Award

The Professor M.V. Pylee Award for the Distinguished Academician of India -2003 is being awarded to Dr K.Venkatasubramanian, noted Economist, Educationist, Educational Planner and Visionary. The Award was instituted at Cochin University of Science and Technology from an endowment created by Prof. M.V. Pylee, former Vice Chancellor of the University. The prestigious triennial award consists of a cash prize of Rs. Two lakhs, a memento and a citation. Earlier, noted Social Scientist, Prof. M.N. Srinivas, famous Astrophysicist Dr. J.V. Narlikar and renowned Medical Technologist and Educationist Dr. M.S. Valiathan were the recipients of this Award.

Dr.Subramanian studied at Madras and Columbia universities. He served many Indian universities, and educational establishments. He was the visiting Professor in York University, England. He was the first (founder) Vice Chancellor of the Pondicherry University. As Director of Public Instruction in Tamil Nadu, he initiated many innovative steps.

Dr. Subramanian is the author of about 26 books, most of which are in the field of Knowledge. Along with Dr. A.P.J. Abdul Kalam, the then Principal Scientific Advisor to Govt. of India, he authored the 'Knowledge Task Force Report' of the Planning Commission on the call of the Prime Minister to shape India as a Super Knowledge Power. The Report received global appreciation. He is now a Member of the Indian delegation to UNESCO. He was asked to lead the Indian Delegation to the World Bank Policy Forum on Knowledge for Development at London. He visited many countries including U.S.A., Canada, China, Russia and Japan. He was a member of the Dr. Chhatopadhyaya National Education Commission along with Dr. M.S. Valiathan.

Dr.Subramanian received many honours and awards. The Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal awarded an Honorary Doctorate (D.Sc.) degree to him for his significant contribution in higher education and knowledge. He received the Silver Elephant National Award from the President of India in the field of Scouting. He is also a recipient of the Shirdi Sai Bhaba National Gold Medal for Excellence in Higher Education.

The Prof. M.V. Pylee Award is given on the basis of a two-tier selection process. A local organising committee scrutinizes all nominations received and prepare a short-list of all potential candidates. This short-list, along with the bio-data of the candidates is sent to the members of the final Award Committee which consists of prominent educationists, scientists, judges, administrators and important personalities. A consensus candidate for the Award is selected from the independent ranking by the members of the Award Committee. For the 2003 Award, the members of the award committee were Dr.M.S. Swaminathan, Dr. Deepak Nayyar, Vice Chancellor, University of Delhi, Justice P.B. Savant, former Judge of the Supreme Court of India, Dr. M.S. Valithan, Dr. S. Ramamurthy, Secretary, DST, Dr. K. Natarajan, Chairman, AICTE, Mrs. Padma Ramachandran, Retd. Chief Secretary, Kerala, Dr. M.V. Pylee and Dr. N. Unnikriahnan Nair, Vice Chancellor, CUSAT (Chairman). The Award for 2003 will be given to Dr. R. Venkatanubramanian, at a special function, which will be announced shortly

(Contd. on page no. 18)

Contribution from Various Sources

Sl. No.	1 University / Institution	2 State Govt	3 Central Govt.
1.	Sri Krishnadevaraya University, Anantapur	78673	4852
2.	Sri Padmavati Mahila Viswavidyalayam, Tirupati	44220	6050
3.	Sri Ramachandra Medical College and Research Institute, Chennai	10029	2000
4.	Sri Venkateswara University, Tirupati	214504	22698
5.	Swami Ramanand Teerth Marathwada University, Nanded	28900	12400
6.	Tamil Nadu Agricultural University, Coimbatore	229650	305355
7.	Tamil University, Thanjavur	30829	4900
8.	Tamil Nadu Veterinary and Animal Sciences University, Chennai	293222	15406
9.	Tezpur University, Napam	0	60264
10.	Thapar Institute of Engineering and Technology, Patiala	17137	15140
11.	Tripura University, Agartala	23859	23134
12.	Utkal University, Vani Vihar, Bhubaneswar	96321	15331
13.	Vidyasagar University, Midnapore	20607	300
14.	Vikram University, Ujjain	68000	42700
15.	Visveswaraiah Technological University, Belgaum	77406	0
16.	West Bengal University of Animal and Fishery Sciences, Kolkata	36700	6300
	Total 154 Universities[1]	18543622	17352587
	Total P.G. Colleges-63	1908129	1440402
	Grand Total	20451751	18792989

Note :

[1] The data was compiled for total 154 Universities. The data of the rest of the 138 Universities other than these 16 universities was given in different earlier issues of the University News.

Received by Universities/Institutes-IV

In Rs. 000

4 *Industries*	5 *Foreign Sources*	6 *Donations*	7 *Own Source*	8 *Others*	9 *Total*
245	0	452	49285	6748	140255
0	0	0	2000	1415	53685
0	0	60020	440402	70934	583385
44900	1846	14761	7661	14313	320683
0	0	0	9000	300	50600
269	97400	1490	111000	11569	756733
0	0	1800	220	2498	40247
1509	16221	1509	20969	2665	351501
0	0	0	0	0	60264
46	0	735	39895	14312	87265
0	0	0	0	1607	48600
946	0	0	3000	0	115600
0	0	0	5558	0	26465
0	0	0	59000	300	170000
0	0	0	55663	171	133240
0	0	0	0	2500	45500
619523	557247	389023	11303371	2988901	51754274
33508	68252	131166	394589	218731	4194777
653031	625499	520189	11697960	3207632	55949051

Source: National Report on Quantification of Manpower and Financial Resources Devoted to Research and Development in Science and Technology from Higher Education Sector-2002, Department of Science and Technology, Government of India, New Delhi.

(Contd. from page no. 15)

Endowment Lecture on HRM

The Sixth Shri S. Ramachandra Iyer Endowment Lecture on 'Trends in Human Resource Management' was organized recently by Shanmugha Arts, Science, Technology and Research Academy, (SASTRA) Deemed University, Thanjavur. Shri S. Chandrasekar, Advisor, Larsen & Toubro, Chennai while delivering the lecture laid stress on the paramount need for a value-based approach to management in all fields of human activity. The speaker said that students should be prepared to adapt to the changing environments and should have a global vision to translate their skills into action. They should always be curious to know about the various rapid changes happening in the world and their applications in different fields. As India has been playing a vital role in the global activities we should prepare ourselves to meet and cope with the challenges that confront us. If we do not become leaders, others will lead us.

Shri Chandrasekar said that there will not be any hierarchal pattern of organizations in future. He explained various factors involved in the Human Resource Management such as leadership, emotional stability, perseverance, ability to face challenges, motivation etc. "We should have indomitable faith in ourselves. Failures should be viewed only as stepping stones for success in the future. If the great Newton had not been curious to know why the apple came down instead of going up, the law of gravitation would not have been discovered," he added. He referred to the rapid changes and developments taking place in the World. He expressed his happiness over the excellent infrastructure created by SASTRA and marveled at transformation of a barren land into a Centre of Excellence in Thanjavur District. He lauded the phenomenal growth and the development of the campus over the past 19 years since it was established by the founder Shri Ramachandra Iyer in whose honour, the endowment lecture was being delivered.

He also mentioned about L&T's Sponsored Build India Scholarships for M. Tech students in the Indian Institutes of Technology, New Delhi and Chennai. There was a lively interaction between the students and the speaker. When one of the students asked whether there could be such a sponsorship of students by L&T from SASTRA, he responded that it had already begun. Earlier, Prof. R. Kandaswamy, Registrar welcomed the Chief Guest and Prof. S. Anantha Padmanaban, Dean, School of Civil Engineering, honoured the Guest. Prof. S. Seshadri proposed a vote of thanks.

National Workshop on Institute-Industry Interaction

A three-day National Workshop on 'Institute-Industry Interaction on Research in Unani Medicine' was organized recently by the Jamia Hamdard, New Delhi to identify areas of collaboration. Nearly 150 delegates from academic and R&D Institutions, right from Kerala in the extreme south to Jammu and Uttaranchal in the north attended the Workshop. In addition, 11 industries manufacturing Unani/herbal formulations also participated in the meeting. Nearly 72 delegates presented their work in the technical sessions that addressed various aspects of Unani medicine including their standardization and quality control as well as their use in the treatment of various disorders such as endocrinological, neurological, urological, gastro-intestinal, reproductive, cardio-pulmonary, oncological, musculo-skeletal and skin disorders. Few papers were also presented on cosmetology. The poster sessions had 43 participants. To encourage young researchers in the field of Unani system of Medicine, five awards were constituted for the best poster presentations.

The Vice Chancellor in his welcome address encouraged the younger generation of researchers in Unani medicine to face the challenge of today's times. The Convener of the Workshop, Dr. M. Z. Abdin announced the formation of working group to develop R&D programme in collaboration with Hamdard Dawakhana, VLCC, Rex Remedies and Masiha Ayurvedic and Unani Remedies. Dr. Laxman Prasad, Adviser, DST while introducing the salient features of DPRP, talked about the hurdles the programme faced in the initial period and mentioned about the pro-active efforts taken by DST in organizing such National workshops/seminars in different systems of Indian and modern medicine including veterinary drugs. Prof. A. A. Ansari, Adviser (Unani), Department of AYUSH, and Dr. M. Khalid Siddiqui, Director, CCRUM emphasized the importance and significance of usage of modern techniques in standardization and up-gradation of Unani system of Medicine. The Chief Guest of valedictory function, Dr. D. N. Tiwari distributed best poster awards to the poster paper presenters. Dr. (Mrs.) S.N. Khan, DST, proposed the vote of thanks.

Admissions Trend in B.E Courses

According to statistics made available by the CET Cell Bangalore, students this year continued to prefer traditional professional courses over the IT courses during admissions to engineering colleges. Computer Science and Information Technology turned out to be among the least preferred courses by the students. Nearly, one third of the 3,934 seats available in 90-odd engineering colleges across the State of Karnataka have remained vacant. The government relaxed the eligibility norms in the qualifying examination from a minimum of 50 per cent to just pass marks (35 per cent). Even then, as many as 1,141 Information Science seats have remained vacant, followed by Computer Science i.e. 841. When this is compared to the preference of students in what was considered archaic branches like electrical and civil engineering only a few years ago - of the 2,119 seats in electrical branch, only 299 seats have remained vacant (12 per cent), while only 242 of the 1,586 civil engineering seats were left with no takers. Electronics course remained the top choice among students, only 552 seats of the 5,858 available seats remaining vacant in this category. Students proved the Biotechnology critics wrong by opting for 460 of the 464 seats leaving only four biotechnology seats vacant across the State. Telecommunication also proved to be a favourite with as many as 1,174 of the 1,258 seats finding takers. All the seats available in courses like polymer technology, manufacturing science, and silk technology were opted by students.

In Industrial Production 287 seats out of 1004 seats were vacant, similarly 107 out of 726 in Instrumentation Technology; 45 out of 195 in Architecture; 4 out of 22 in Industrial Engineering management; 78 out of 318 in chemical; 36 out of 219 in Medical electronics; 27 out of 103 in Textiles; 2 out of 30 in Transportation; 17 out of 30 in Mining; 16 out of 30 in Ceramics; 9 out of 60 in Bio-medical; 1 out of 23 in Printing Technology remained vacant. In all, 4,125 engineering seats of the 28,733 seats remained vacant this year. The trend was no different in case of diploma students opting for engineering seats. Of the 3,843 available seats in this category as many as 1,371 seats had no takers. Half of the vacant seats were in IT related courses.

International Centre at Madras University

The University of Madras, Chennai is reportedly planning to set up an International Centre in its Campus. Prof.S.P.Thyagarajan, Vice Chancellor, University of Madras outlined the proposed structure and the mandate of the initiative, which would raise the educational standards, invite foreign students, secure funds from international agencies, build economic competitiveness, place students in the global market, enhance the capacity of teachers/researchers, as also the quality of academic programmes and foster contacts among academicians across the nations.

On the modalities, the Vice Chancellor said that the agencies in other nations could advertise their intellectual wares to attract students, offer curricula through franchised degree/diploma programmes, or on the Internet; promote mobility of students through credit transfer mechanisms. "The core component of internationalisation is development of curriculum, which could prepare the students to perform professionally and socially in a multicultural context. At the same time, its design should help both the local and foreign students. Besides, it should prepare students for defined international professions in cutting edge areas of science and technology, promote exchange of credits/ courses across universities within and outside the country and must have specially-designed components for foreign students," Dr. Thyagarajan said. "To promote these concepts, there is a need for policy reform for improving infrastructure and adding seats for foreign students, simplified visa procedures, creation of hostels of international standards, streamlined procedures to promote partnerships, creating brand equity for specialised Indian programmes," he said.

National Level Faculty Development Workshop

Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi conducted a two-day National Level Faculty Development Workshop on 'Best Practices in Soft Ware Quality Engineering' recently. The Workshop was organized as a part of regular quality improvement programme for faculty members of various Institutes and Engineering Colleges in the country. Inaugurating the Workshop, Dr. M. N. Hoda, Director of the Institute, emphasized to bring maturity among the soft ware developers to really meet the success and deliver the soft ware projects on time, within cost and as per quality guidelines. He also reminded the faculty delegates to cultivate this culture amongst the students so as to catch them young.

The Workshop was attended by the faculty members from several Institutions and representatives from various industries across the country, in significant numbers. During the programme, the quality standards like SW-CMM, CMMI, PCMM, SPICE, SIX SIGMA, ISO and IEEE standards, etc. have been discussed.

Mr. Sunil Goyal, Chief Operating Officer (COO), Momentum Technologies Ltd., a CMM level 5 company, has chaired the valedictory session and discussed the impact of the transformation on the workforce and the quality of the software with CMM assessment. During the valedictory session, it was realized that the corporates' requirement is now different. They want a finished product. Hence, students have to be groomed accordingly, for which teaching community and the Institutions have got more responsibility to meet with the expectations of the contemporary corporate world.

National Seminar on Emerging Trends in Tourism

Tourism is essentially a societal expression of natural human instinct for experiencing the alien land and culture, enhancement of knowledge quotient through educative interactions and of course attaining the enjoyment of what could be termed as rejuvenation through entertainment. The economic consequences of this phenomenon are wide-ranging and capable of influencing the development process of various nations, regions, societies and to a great extent of individuals. Tourism has now emerged as a huge economic force on the world horizon, singularly accounting for more than 8.5% of the total world trade. Any industry can yield optimum results if we have an insight into the promises and challenges that it beholds for future. The current upward trend, after about three darkish years, is being looked upon as silver lining and every country is forming strategies to benefit from this scenario. With this background, the Indian Institute of Tourism and Travel Management (IITTM), Gwalior is organizing a National Seminar on 'Emerging Trends in Tourism' during 9 - 10 February,2004 which aims at conducting a prognostic and introspective exercise to spell out the emerging trends, especially with reference to India. The Objectives of the Seminar are:

- To discuss emerging trends in Tourism and Travel trade.
- To provide a common platform to discuss, challenges faced by the industry in the challenging scenario.
- To evolve strategies to optimize the benefits

Three Technical Sessions namely New Age Tourism; Emerging Trends and new thrust area of Indian Tourism; Marketing Strategies for Tourism Promotion will be held in the Seminar. This seminar is open to academicians, researchers, practicing professionals, NGO's, Planners and administrators. Persons interested to participate in the Seminar may contribute their papers on the theme or on any other related subjects with specific recommendations for discussion in the technical sessions. The participants are expected to defray a registration fee of Rs. 500/- (Rs. 300/- for students / research scholars) by cash / DD drawn in favour of IITTM payable at Gwalior. For further details contact Dr. Sandeep Kulshreshtha, Co-ordinator-Seminar IITTM, Govindpuri, Gwalior Mobile : 98262 14448, 2422798 (R) E-mail: sankul7@hotmail.com or Mr Punit Gautam, Asst Coordinator - seminar IITTM, Govindpuri, Gwalior Ph:5000107(0)/5010703(R) E-mail: punitgautam@yahoo.co.uk or iittm@sancharnet.in

Recent Trends in Global Networking

Sree Saraswathi Thyagaraja College, Pollachi affiliated to Bharatiar University, Coimbatore is organizing an AICTE sponsored National Level Seminar on Recent Trends in Global Networking on February 14th 2004. In recognition of its service and efficiency the college obtained the coveted ISO 9001:2000 Certification from International Standards Organisation through National Quality Assurance Limited, United Kingdom. The institution offers UG, PG, and Research programmes. The objectives of the national seminar are

- To brainstorm the young minds with the recent trends in Global Networking.
- To explore new avenues in Global Networking.
- To forecast the future trends in Network Security
- To shed new lights on Traffic Scheduling Protocols and its architecture
- To highlight new jargons in positioning the mobile host

Main topics decided for the Seminar are Network Security, Network Protocols & Architecture, Mobile Networking, Multimedia Networks, Optical Networking, High Speed Networks, Network Applications. Nationwide faculty members and students of IT/ Computer science are eligible to participate in the Seminar. Registration fee for delegates from industries is Rs 250/- each, from academics is Rs 150/- and for students it is Rs 100/- each. The registration fee may submitted as demand draft drawn in favour of the Principal, Sree Saraswathi Thyagaraja College, Pollachi on or before 31st January 2004 For further information contact the Principal, Sree Saraswathi Thyagaraja College, Palani Road, Thippampatti, Pollachi- 642107, Coimbtore Dt. Tamil Nadu. Phones : (04259) 266550, 266009; Fax: (04259) 266009; E-mail; stc@ac.in; Website : www.stc.ac.in.

News from Agricultural Universities

Study Group Visit to SKUAST-K

The study Group of Parliamentary Standing Committee on Agriculture visited Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir recently. The Group, under the Convenership of Sh. B.L Bhargawa, Hon'ble Member of parliament, took stock of the role played and achievements made by the university in the development of agricultural and allied sciences in the region. Prof. Anwar Alam, Vice Chancellor, SKUAST-K presented a detailed account of achievements made in the area of education, research and extension services; and their role in the socio-economic uplift of the region. The detailed account given in terms of human resource development, diversification of varietal profile in agricultural and horticultural crops, need-based agro-technologies and their dissemination to the end users was the hall -mark of the meeting held with the members of the Study Group, along with Officers from ICAR, and State Agriculture Production Department.

Prof. Alam also enlightened the Study Group about the existing faculties and the ones to be developed in future to fulfill obligations as SAU together with the required infrastructure. Despite the University having been established in 1982, the intervening period of political turmoil in the Valley deprived the institution the opportunity for development of adequate resources and infrastructure. The Study Group appreciated the efforts made by the University in addressing the issues confronting the State's agricultural development and recognized the need for liberal financial support from the central funding agencies. The Group recommended one time assistance of Rs. 30 crores to strengthen the University's R&D infrastructure so that it continues to play proactive role in the socio-economic development of the region.

AIU News

Workshop on Information Technology in University Management

A Training Workshop on 'Role of Information Technology in University Management' was organised by the Association of Indian Universities in collaboration with Goa University, Goa from December 15-19, 2003. Dr. M. Goswamy, Director (Research) AIU was the Convener of the Workshop. Dr. Usha Rai Negi was the AIU Coordinator and Dr. V. V. Kamat, Reader, Department of Computer Science and Technology, Goa University, Goa was the local Coordinator of the Workshop at Goa. Objectives of the Workshop were to sensitize university administrators about the recent developments in Information Technology and to train the administrators in the use of computers and application of IT for improving the quality and efficiency of university management and decision making.

Thirty five participants including Registrars, Controller of Examinations, Finance and Accounts Officers, Deputy Registrars and Assistant Registrars from various Indian Universities. attended the Workshop. During the inaugural session, Dr. Kamat delivered the welcome address. Theme presentation of the Workshop was done by Dr. Goswamy. He presented the significance of the Workshop and emphasized the role and use of Information Technology for academic as well as administrative activities in the universities.

The Guest of Honour, Mr. Bhaskar Naik, Director, Higher Education, Goa stated that Goa is the first State in India to go into a unique scheme wherein each child is given a computer for Rs. 1000/- deposit. He also discussed the role of computers in university management. The Chief Guest Prof. Dayanand Dongaonkar, Secretary General, Association of Indian Universities in his inaugural address said, "learning the technology is as important as learning the language, if we want university system to be efficient and transparent there is no substitute for technology."

Prof. P. S. Zacharias, Vice Chancellor, Goa University, Goa in his presidential address said that the Workshop was organised to sensitize a larger group of university administrators in using IT for University Management. He expressed his confidence that the Workshop will help the participants in their work for next five years. He advocated the use of IT to enhance transparency in the system. Discussing about the Goa University, he said that the University had started a unique programme of digitizing old manuscripts which are otherwise difficult to handle in paper form. Vote of thanks for the inaugural session was proposed by Prof. P. V. Desai, Acting Registrar, Goa University, Goa.

In the technical sessions, lectures and demonstrations were presented by eminent Resource Persons. In his paper on 'Role of Information Technology in University Management' Prof. Dongaonkar discussed about various university activities viz administration, academic examinations, evaluation, library management etc. where IT can play a significant role. He threw light on advantages and difficulties of IT applications through a Case Study on Maharashtra University of Health Sciences, Nashik. Dr. Kamat delivered a talk on 'Role of Information Technology in University Management: An Overview' in which he discussed about various models of education system, like Gurukul Model, Institutional Model etc. and elaborated upon academic and administrative role of universities for supporting teaching-learning activities. Dr. A. G. Balasubramanian, Professor, Department of Management Studies, Goa University delivered a lecture on 'Decision Making Process in University System' in which he discussed about mismatched decision speed, parallel decision making process , group decision making and impact of IT on decision making process in universities. A Paper on 'Library Automation: Past, Present and Future' was delivered by Dr. P. V. Konnur. Through the demonstration of the Goa University Library system, he explained about Library Information System. Paper on IT 'Infrastructure for the University' was presented by Mr. R. Karmali. He said that those universities which do not plan for the future will fall behind. He also explained about the changes and challenges in higher education.

Dr. Anupam Saraf from Institute for Change Research delivered a talk on 'E-University Governance' in which he emphasized on the importance of mission of the universities and role of IT in achieving the mission. He discussed about governance issues of universities like knowledge centric, skill centric, teacher centric, student centric, industry centric, economy centric issues. A paper on 'University Examination System' was delivered by Mr. M. Chakraborty explaining about the process of computerization in the Goa University Examination System. He said that the activities of the examination section were divided into three phases viz. pre-exam phase, examination phase and post-exam phase wherein most of the activities were computerized. He also discussed about the problems involved in manually doing the things. A paper on 'University Accounting and Financial Management' was presented by Mr. S. Kenkre in which he recounted certain areas such as bank-statements, receipts, student information etc. which need to be computerized. In his paper on 'Goa University Payroll' Mr. S. Bandodkar explained about various inputs for computerizing the payroll system like employee attendance, increment details, appointments and retirement, other allowances etc.

A Paper on Issues and Challenges in using IT in Management of Educational Institutes was delivered by Prof. S. L. Narayanmurthy (Advisor, Goa Government). He gave detailed information about the application of Information Technology in IIT Bombay. In the lab session, demonstrations and practice were provided on Excel, Internet, Multimedia, Power Point etc which are essential for university management. There was a lecture on 'Online Education and Virtual Universities' by Mr. Milind Anvekar and a Paper on 'Educational Resource Planning' by Mr. Priolkar.

In the valedictory session a brief report of the workshop was presented by Dr. Usha Rai Negi. Prof. Zacharias in his valedictory address, emphasized the need of IT in University Administration. He also gave a brief account of the use of IT in Goa University. A vote of thanks was proposed by Dr. F. A. Fernandes, Director, Academic Staff College, Goa University, Goa.

News from Abroad

UNIVERSIDAD 2004

At a time when humanity is being influenced by the phenomenon of the globalisation, the knowledge society, the impact of information and communications technologies and the accelerated deterioration of the environment, which has a severe impact on the life of all society, the universities will have to assume a leading role in the sustainable development of our countries. In this light, the fourth International Conference on Higher Education "UNIVERSIDAD 2004" whose motto is 'the University for a better world' is being held in Havana from 2-6 February 2004. It will be a forum to examine collectively, the necessary transformations that are required in the task of the institutions of Higher Education, so that these assume a decisive role in the sustainable development of our countries. The Conference is intended for professors and students, college students and postsecondary students; researchers in superior education; Directors of institutions of higher education; civil employees of institutions, organisations and companies related to higher education. Themes of the Conference include -

- To identify the main tendencies of development of the Superior Education for the sake of a better world.
- To analyse experiences about the contribution from the universities to the solution of the social and economic problems that exist in communities and for sustainable development. To enrich the techniques of Higher Education and in its Didactics, with views to satisfy the present needs for training of educational professionals.
- To promote the establishment of forms of international cooperation between institutions, organisations, organisations and universities, to improve the quality of Higher Education and to be able to enhance their contributions to the society.

The scientific program will include plenary sessions of specialised conferences by personalities of recognised international prestige, round tables and panels which will debate the central subjects of the Conference. In committees that will meet simultaneously, specific subjects will be treated, including special conferences, round tables, panels, oral presentations , static poster) and dynamic (video) presentations. During the Conference, in addition, six scientific events will be held. Courses will be given by prestigious Cuban professors on diverse subjects in Higher Education. Visits to interest centers will also be organized.

The presentation of works of scientific research, of development, application and also the concrete experiences of the professors and directors in their university and the projects and experiences of work in the communities will be encouraged. In addition, the Conference will include several topics covering central, specific and scientific subjects. The languages of presentation of works will be Spanish , English and Portuguese .The simultaneous interpretation will be available. Translation from Spanish to English or vice versa will be offered in the rooms that ask for it. There will be an exhibition which will cover products and services of those companies related to higher education, provide opportunity to meet with new or well-known clients in the areas of the exhibition, to facilitate entry in new markets, and to present the latest advances in higher education.

Participating companies may include - scientific and academic companies, universities and organisations that commercialise equipment of laboratories, scholastic, educational materials of all types, didactic tools, reagents, glasswork, means, software, scholastic furniture and of laboratories for education, as well as scientific and technical products and literature, and results of investigations made in universities. The Conference would also include special visits in order to see the Cuban education system.

For further details contact the Executive Secretariat of the Conference, Dr. Silvio Montalvo Martinez or Ing.. Raul Nariño Rodriguez, Executive Secretary, Ministry of Higher Education, Street 23 no. 565, esq. F Havana, Cuba, 10400 CP Havana, Cuba. Telefax: (53)(7) 553477/552359 Email: ofieven@reduniv.edu.cu or univ2004@reduniv.edu.cu Website: http://www.universidad2004.cu/ or Lic. Mireya Mesa Tamargo Professional organiser of Congresses Palace of Conventions of Havana, Post-office box 16046, Havana, Cuba Telephones: (53)(7) 287541/226011 to the 19, ext. 1507 ❑

THESES OF THE MONTH

A list of doctoral theses accepted by Indian Universities (Notifications received in AIU during October-November, 2003)

HUMANITIES

Fine Arts

1. Mohaisen, Jabbar Homaidi. **The use of Arabic calligraphy in Indian architecture and painting, 12th to 18th century AD.** (Dr Alka Pande), Department of Fine Arts, Panjab University, Chandigarh.

Drama

1. Shevtekar, Jayant Bhaskarrao. **Rangmanchiya abhinayat Bharat-Natyam madhil abhinyacham sthan.** (Dr Laxman N Deshpande), Department of Dramatics, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

Music

1. Ahlawat, Manisha. **Adhunik khayal gayaki per Ustad Amir Khan Sahib kee gayan shailly ka prabhav: Ek sameekshatmak adhyayan.** (Dr Hukum Chand), Department of Music, Maharshi Dayanand University, Rohtak.

2. Ahluwalia, Amrit Kaur. **Gurmat sangit ke pariprekshya mein Dhadhi Gayan vidha ka udgam evam vikas.** Department of Music, Kurukshetra University, Kurukshetra.

3. Kashyap, Meera. **Vartman sandarbh mein shastriya sangit ke adhyatmik paksha ke prati samajik chetna: Ek mulyankan.** Department of Music, Kurukshetra University, Kurukshetra.

4 Mamta Rani. **Kishoravastha mein vyaktitva evam shaikshanik uplabdhi per Bhartiya sangit ke prabhav ka prayogatmak adhyayan.** Department of Music, Kurukshetra University, Kurukshetra.

5. Mohinder Singh. **Himachal Pradesh ke lok geeton mein rasa yojana.** (Dr Saroj Ghosh). Department of Music, Panjab University, Chandigarh.

6. Paramjeet Kaur. **Bhartiya shastriya sangeet ke kshetra mein badalate privesh mein ragatmak pahaluyon kee drishti se Shri Guru Granth Sahib ka mahatva.** (Dr Hukum Chand), Department of Music, Maharshi Dayanand University, Rohtak.

7. Sinha, Krishna Kumar. **Darbhanga Raj main Dhrupad gayaki kee parampara.** (Dr Manorma Jha), Department of Music, Babasaheb Bhimrao Ambedkar Bihar University, Muzaffarpur.

Geography

1. Das, Rajendra Kumar. **Terrains and agriculture in the Katkamsandi Anchal, Hazaribag.** (Dr Kamla Prasad), Department of Geography, Vinoba Bhave University, Hazaribag.

2. *Gupta, Krishnendu.* **Dwarakeswar River Basin: A study in applied geomorphology.** Department of Geography, Visva Bharti, Santiniketan.

3. Holer, Prakash Basavantappa. **Spatio-structural dimension of industralisation: A case study of Shimoga District.** *(Dr S R Nidagundi), Department of Geography, Karnatak University, Dharwad.*

4. Khan, Mohd Sayeed. **Impact of agriculture on socio-economic development in Tarai District, Uttar Pradesh.** *(Dr* Naushad Ahmad), Department of Geography, Aligarh Muslim University, Aligarh.

5. Maity, Amal Kumar. **Land forms, settlement and agricultural land use in Balarampur Block, West Bengal.** (Dr Shukdeo Sahu), Department of Geography, Vinoba Bhave University, Hazaribag.

6. Majumdar, Sudipta. **Siliguri: An urban study in socio-economic considerations.** (Prof B Bhattacharya), Department of Geography, University of North Bengal, Raja Rammohunpur, Distt Darjeeling.

7. Manakari, Manjunath Prakash. **A comparative geographical analysis of health care facilities in Bidar and Dharwad Districts.** (Dr S R Patil), Department of Geography, Karnatak University, Dharwad.

8 Mathapati, Shashidhar Sangayya. **Environment and health in Belgaum division of Karnataka State: A spatial analysis.** (Dr S R Patil), *Department of Geography,* Karnatak University, Dharwad.

9 Nyonyo. **Spatio-temporal analysis of irrigation and its impact on agricultural development in Sedawgyi Region, Myanmar: A geographical probe.** (Dr Rayamane A S), Department of Geography, Bangalore University, Bangalore.

10. Santosh Kumar. **Evolution and changing faces of Madhepura as an urban centre.** (Dr Rajendra Yadav), Department of Geography, Bhupendra Narayan Mandal University, Madhipura.

11. Sarma, Kiranmay. **Coal mining and its impact on environment of Bokrek Biosphere Reserve, Meghalaya.** (Prof R K Rai and Dr S K Barik), Department of Geography, North Eastern Hill University, Shillong.

12. Sharma, Archana. **Uppari Sindh Basin mein sansadhan: Vishleshan evam kshetriya vikas.** (Dr V P Sati), Department of Geography, Jiwaji University, Gwalior.

13 Shrivastava, Asha. **Murena Jile kee sanskriti pristhitiki: Ek bhougolik vishleshan.** (Dr R S Pawar), Department of Geography, Jiwaji University, Gwalior.

14. Shyam Kumar. **Evolution and types of rural settlement in Muriganj C D Block.** (Dr Shio Muni Yadav), Department of Geography, Bhupendra Narayan Mandal University, Madhipura.

15. Tiwari, Sarwesh Prasad. **Rewa Shahar mein manav swasthya per pradushan ke prabhav ka bhougolik adhyayan.** (Dr C P Tiwari), Department of Geography, Awadhesh Pratap Singh University, Rewa.

History

1. Baruah, Jumi. **Relation of the Mayamara Satra with important Kala Samhati Satras.** (Dr S L Baruah). Department of History, Dibrugarh University, Dibrugarh.

2. Bhadre, Nagnath Gangaram. **Peshwe kaleen samajik, arthik lok jeewanache sinhavalokan, 1793 to 1898.** (Dr N N Nagrale), Department of History, Swami Ramanand Teerth Marathwada University, Nanded.

3 Bhat, Hemant Heramba. **A study of inscriptions and temples of Northern part of Coastal Karnataka.** (Dr S V Padigar), Department of History, Karnatak University, Dharwad.

4. Bhatt, Nidhi. **Maharshi Dayanand Saraswati: Vyaktitva evam krititva.** (Dr Madanlal Panwar), Department of History, Vikram University, Ujjain.

5. Chauhan, Nita. **Samkaleen Bharat mein ahinsa ka prayogatmak roop: Swatantraya prapti se poorva, pashchat evam bhavishyonmukhi drishti.** (Dr B R Dugar), Department of Non Violence and Peace, Jain Vishva Bharati Institute, Ladnun.

6. Dhanoriya, Lalita. **Madhyakaleen bhakti andolan mein pramukh mahila santon ka yogdan.** (Dr Prabha

Srinivasulu), Department of History, Vikram University, Ujjain.

7. Dhirendra Kumar. **Manusmriti kaleen rajya evam prashasan: Ek aitihasik adhyayan.** (Dr R B Mandal), Department of History, Bhupendra Narayan Mandal University, *Madhipura*.

8 Dwivedi, Rekha. **Itihaskar Dr Raghuveer Singh evam unke itihas granth.** (Dr Manohar Singh Ranawat), Department of History, Vikram University, Ujjain.

9. Funne, Rama Sahebrao. **Marathvadyateel muktiladhyateel *Parbhani Jilchyala yogdan: Ek chikitsak abhyas.*** (Dr V L Kalekar), Department of History, Swami Ramanand Teerth Marathwada University, Nanded.

10. Goyal, Sharankhla. **Partition of Bengal and creation of East Pakistan: A socio economic study of partition from 1946-47.** (Dr P K Srivastava), Department of History, University of Lucknow, Lucknow.

11 Hegde, Balakrishna Manjunath. **Art and architecture of Sirsi Region.** (Dr H R Raghunath Bhat), Department of Ancient Indian History and Epigraphy, Karnatak University, Dharwad.

12 Hussain, Fatima. **Chishtis during the Delhi *Sultanate: A balance between ideal and practice.*** (Prof Harbans Mukhia). Centre for Historial Studies, Jawaharlal Nehru University, New Delhi.

13. Jayanth, M **Dance-drama as a medium of communication in Television and its relevance to Indian culture.** *(Prof V Krishan Rao), Department of Ancient Indian* History, Culture and Archaeology, Osmania University, Hyderabad

14. Jha, B N **British colonial intervention and tribal responses in the North East Frontier of Assam.** (Prof S Dutta), Department of History, Arunachal University, Itanagar.

15 *Khan, Firoz* ***Uttari Madhya Pradesh ke Arabi evam Farsi abhilekhon ka ek adhyayan: Arambh se 18vin*** **shatabadi tak.** (Dr A K Singh), Department of Ancient Indian History, Culture and Archaeology, Jiwaji University, Gwalior.

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Salim Ali Centre for Ornithology and Natural History, Coimbatore

Requires:

1. **Research Associate:** (to work in a project on "**Carrying Capacity Studies in Teesta River Basin in Sikkim with reference to Mammals, Birds, Herpetofauna and Butterflies**"); Salary: Rs. 11,000 + HRA (as admissible); Essential qualification: Ph.D in Animal Ecology; Age: less than 35 years as on 1.1.2004; Duration: two years or co-terminus with the project whichever is earlier.
2. **Project Assistants** (2 posts), Salary Rs. 4000/- (Consolidated)

   Post : 1 Essential qualification: B.Com; Experience in Typewriting (English) and Word Processing; Place of Posting : Sikkim.

   Post : 2 Essential qualification: Graduate in Biological Science; experience in Typewriting (English) and Word Processing; Place of posting: Headquarters.

Application on plain paper in the following format should reach the Director, Salim Ali Centre for Ornithology and Natural History, Anaikatty P.O., Coimbatore - 641 108 **within 20 days** of publication of this advertisement (1) Name and nationality; (2) Permanent and correspondence address; (3) Date of birth and age as on 1.1.2004; (4) Educational qualifications with copies of relevant documents; (5) Details of relevant experience; (6) List of publications, and (7) One page write-up on the candidate's research interests and academic ambition (for Research Associate post). SACON reserves the right to select candidates for interview based on academic qualifications, experience and age. The selected candidate will be expected to commence work immediately after selection.

TATA INSTITUTE OF SOCIAL SCIENCES

(A Deemed University)
Post Box No. 8313, Deonar, Mumbai - 400 088
Phone : 91-022-25553289 - 96 Fax : 91-022-25562912
Website: http://www.tiss.edu e-mail: acadsec@tiss.edu

TISS, the pioneer Institution for imparting Human Service Professional education, announces admission to its following Post Graduate programmes -2004-2006.

1. **M.A. in SOCIAL WORK** - available specialisations. (i) Criminology and Correctional Administration, (ii) Family and Child Welfare, *(iii) Medical and Psychiatric Social Work*, *(iv) Social Welfare Administration*, and (v) Urban and Rural Community Development.
2. **M.A. in PERSONNEL MANAGEMENT & INDUSTRIAL RELATIONS**
3. **MASTER of HEALTH ADMINISTRATION**
4. **MASTER of HOSPITAL ADMINISTRATION**

Eligibility: A Bachelor's degree in any faculty with a minimum aggregate marks of 50% (40% for SC/ST) for all programmes. However, for programme No. 2, Science/ Engineering degree with a minimum aggregate marks of 55% (45% for SC/ST) required. However, the applicants who will complete their final year Bachelor's degree examinations by **June 27, 2004** will also be eligible to apply for programme nos. 1 and 2 only. ***Detailed advertisement*** is available ***for all programmes*** at the Institute's website and also in the Employment News dated 24.01.2004.

RESERVATIONS:

(i) **15%** and **7.5%** of seats reserved for SC/ST candidates respectively. Free applications will be provided on production of copies of valid caste/tribe certificate and income certificate. (ii) **3%** seats for persons with disability (PWD) of which 1% each *is reserved for (a) Low Vision/ Blindness, (b) Hearing impairment* and (c) Locomotor Disability/Celebral Palsy. (iii) **15%** supernumerary seats reserved for Foreign Nationals.

Application form and Information Brochure can be obtained from the Institute on cash payment of Rs. 250/- in person or through **POST** by sending a DD for Rs. 300/- per form and a self addressed cloth lined envelope (20 cm X 25 cm). *The candidates may apply on the form downloadable from the Institute's website together with a demand draft for Rs. 500/-, per form, towards application process fee.*

LAST DATE FOR RECEIPT OF COMPLETED APPLICATIONS at the Institute **30.01.2004.**

HOSTELS: Limited seats for men and women students.

The tests and interviews will be held in June, 2004 at the Institute only.

The Institute also announces admission to its One semester Certificate Course in Social Welfare Administration.

For any clarification or additional information on any programme, interested candidates may refer to Information Brochure on Institute's website or write to Assistant Registrar (Academic).

MUMBAI,
January 08, 2004

Dr. S.K. Bandyopadhyay
REGISTRAR

CLASSIFIED ADVERTISEMENT

Vidya Vikas Mandal's
GOVIND RAMNATH KARE COLLEGE OF LAW
P.O. Box. No.777, G.R. Kare Road, Tansor, Comba, Margao-Goa
(Affiliated to Goa University)

REQUIRES

Full-Time Lecturers in Law 2 Posts
(One Post Reserved for Scheduled Tribe & One Post for General Category)

QUALIFICATIONS:

(a) Good academic record with atleast 55% marks or an equivalent at Master's Degree in the subject of Law from an Indian University or an equivalent degree from a Foreign University.

(b) The candidate should have cleared the eligibility test for lecturers conducted by U.G.C or similar test accredited by the UGC

Candidates not fulfilling the above qualifications need not apply.

DESIRABLE :
PhD. in Law from an Indian University or an equivalent degree from a Foreign University.
Pay scales, allowances and other service conditions as per the rules, ordinances, statutes of Goa University, UGC and rules of Goa Government.
Candidates should account for break if any, in the academic career. Those already in service must send their application through proper channel. Complete applications in all respect along with attested Xerox copies of mark lists of all public examinations from SSC onwards and caste certificate if belonging to Scheduled Tribe issued by competent authority, should reach the Principal **within 20 days** from the date of publication of this advertisement.

A.S Nadkarni
PRINCIPAL

Sarvoday Shikshan Sanstha, Kowad
COLLEGE OF ARTS, KOWAD
Tal. Chandgad, Dist. Kolhapur
(Affiliated to Shivaji University, Kolhapur)

WANTED

Application are invited from eligible candidates for the following post.

Sr. No.	Designation	Total Posts	Open Post
1	Principal	1	1

Note

1) For the post of Principal, Ph.D. or equivalent published work and a minimum experience of 10 year (for Principal of readers grade) or 15 years (for Principal of Professors grade) of teaching / Research in Universities/ Colleges and other institutions of higher education is essential
2) Educational Qualification, Pay Scales and service conditions will be as per rules of Shivaji University Kolhapur. The details regarding educational qualifications will be supplied to the candidates along with application form.
3) Those who are already in service should apply through proper channel
4) Incomplete application will not be entertained
5) Apply giving full particulars **within a month** from the date of publication of this advertisement to the undersigned.

PRESIDENT

Shri Sharada Bhavan Education Society's
YESHWANT MAHAVIDYALAYA, NANDED
(Affiliated to Swami Ramanand Teerth Marathwada University, Nanded)

WANTED

Following post is to be filled in Shri Sharada Bhavan Education Society's Yeshwant Mahavidyalaya (Granted), Nanded Eligible candidates should submit their application alongwith all necessary documents **within Fifteen Days** from the date of publication of the advertisement by registered post only.

Sr. No.	Post	No.of post	Reservation
1	Librarian	One Full Time	Open

Essential Qualification: M.Lib Post-graduate Examination with minimum 55% marks or its equivalent grade and good academic record. NET/SET pass/PhD./ Mphil and educational qualifications recommended by the UGC & Govt. time to time.

Salary & Allowances: Pay scale as per UGC, State Govt. & Swami Ramanand Teerth Marathwada University rules declared from time to time.

Note:

1. No TA & DA will be paid to the candidates for attending the interview
2. The post will be filled in after getting "No Objection Certificate" from the Director, Higher Education, Maharashtra State, Pune

Address for correspondence:
Principal, Yeshwant Mahavidyalaya,
V.I.P.Road, Nanded,
Tq. & Dist.Nanded-431602.

(D.P.Sawant) SECRETARY
(Dr. N.V.Kalyankar) PRINCIPAL

TEZPUR UNIVERSITY
(A Central University established by an Act of Parliament)
NAPAAM, TEZPUR-784 028
DISTRICT: SONITPUR, ASSAM, INDIA
Ph: 03712-267004, 267005
Fax: 03712-267006, 267005
e-mail: adm@tezu.ernet.in

Advt. No. 1/04

Tezpur University invites applications on plain paper giving full bio data for the post of Librarian in the scale of Rs 16,400-450-20,900-500-22,400.

Qualification:

i. Master's degree in library science information science/documentation with at least 55% of the marks or its equivalent grade of B in the UGC seven point scale and consistently good academic record
ii. At least thirteen years as a Deputy Librarian in a university library or eighteen years' experience as a College Librarian
iii. Evidence of innovative library service and organization of published work

Desirable: M. Phil/ Ph.D in Library Science/Information Science/ documentation/ archives and manuscript keeping.

Application fee: **Rs 500.00, (Rs. 250 for SC/ ST candidates)** in the form of **bank demand draft drawn in favour of Registrar, Tezpur University, payable at Tezpur.**
Application along with application fee should be sent to the REGISTRAR, TEZPUR UNIVERSITY in a sealed cover marked "APPLICATION - LIBRARIAN" on or **before 30 January 2004**. Persons in employment should produce an NOC from their employer at the time of interview.

M. Ahom
REGISTRAR

TEZPUR UNIVERSITY
(A central University established by an Act of Parliament) Napaam, Sonitpur District, Assam-784 028

Advt. No: 2/2004

Applications are invited for the posts of Technical Assistant for the following departments *in the scale of Rs. 4500-125-7000.*

- **Department of Energy (1 post): Qualifications:** B.Sc. major in Chemistry/Physics or P.G. Diploma in Renewable Energy or 3 years Diploma in Mechanical/ Electrical/Chemical Engineering from recognized institutions.
  Desirable: Minimum one year experience in industry/laboratory.
- **Department of Chemical Sciences (1 post): Qualifications:** B.Sc. major in Chemistry and having knowledge in operating instruments like FTIR, Thermal Analyser, CHN Analyser etc. **Desirable:** Minimum one-year experience in Chemistry laboratory equipment maintenance.
- **Centre for Environmental Sciences (One post): Qualifications:** B.Sc (Agri)/B.Sc. major in Chemistry with Botany, Zoology as subjects with three years experience in handling equipment like laser leaf meter, quantum photometer, photosynthesis system, Gas chromatograph & experience of field sampling of atmospheric trace gases.
- **Age:** 21-30 years as on 01.01.2004. Relaxation for SC/ST candidates as per Central Govt. rules.
- **Application can be obtained:** a) From University office or by post on sending a self-addressed envelope of 15 x 30cm. (b) by downloading from **www.tezu.ernet.in.**
- **Fee:** Nationalized Bank **DD of Rs. 200/- (Rs. 100/- for SC/ST)** in favour of **Registrar, Tezpur University payable at Tezpur.** Advance copy will be accepted but those in employment should submit NOC at the time of interview.
- ***Last Date: February 5, 2004***
  (Candidates will have to attend interview at their own cost. The University reserves the right to shortlist the applicants to be called for interview).

M. Ahom
REGISTRAR

N.A.M. COLLEGE KALLIKKANDY
[Aided College Affiliated to Kannur University]
P.O. Kallikkandy, Kannur Dt., Pin 670693

WANTED

Applications on plain paper stating, Bio-Data and qualifications are invited from eligible candidates for the following posts of Lecturers.

Subject	Status	Vacancy
1. Computer Science	Open merit	1
2. Statistics	"	1

Age and qualifications as prescribed by the University and Govt of Kerala.

Applications should be accompanied by a postal order for **Rs. 200/- drawn in favour of the Manager payable at Thuvakkunnue Post Office.** Attested copies of certificates and mark lists should be attached with the application.

The application should reach the undersigned **within 30 days** from the publication of this notification.

Sd/-
K.K. Mohammed
MANAGER

GURU NANAK DEV UNIVERSITY, AMRITSAR

Advertisement No. 1/2004

Applications are invited for the following posts on the prescribed application form so as to reach this office latest by **13-02-2004.** The application form may be obtained either personally from the Cashier, Guru Nanak Dev University, Amritsar on payment of Rs.150/- at the Counter OR by post from the Assistant Registrar (General) by making a written request accompanied by a self addressed stamped (worth Rs. 10/-) envelope of 23 x 10 cms. along with a **Demand Draft for Rs. 150/- drawn in favour of the 'REGISTRAR, GURU NANAK DEV UNIVERSITY'** payable at Amritsar. For the posts of Lecturers, the selection shall be made on the basis of the criteria (score-card) approved by the University, a copy of which can be had along with the application form or downloaded from the **University Website: gnduonline.org.**

1. **Professors** (Grade: Rs. 16400-22400)
   Applied Chemistry- One
   Business Management (Regional Campus, Gurdaspur)- One
   Computer Science & Engg.- Two (Transferable to Regional Campuses)
   Law (Regional Campus. Gurdaspur) - One
   Music- One
2. **Director, Academic Staff College** - One (Temporary under scheme)
   (Grade: Rs. 16400-22400)
3. **Readers** (Grade: Rs. 12000-18300):
   Academic Staff College-One (Temporary-under scheme)
   Applied Chemistry- One
   Business Management (Regional Campus. Gurdaspur)- One
   Computer Science & Engg. - Two
   Computer Science & Engg. (Regional Campus. Gurdaspur) One
   Human Genetics- One
   Library & Information Science- One
   Law (Regional Campus. Gurdaspur)- One
   Physics- One
   Political Science-Two
   Punjabi (Regional Campus. Jalandhar)- One
   School of Punjabi Studies- Two
   Zoology- One
4. **Lecturers** (Grade: Rs. 8000-13500):
   Academic Staff College- One (Temporary-under scheme)
   Applied Chemistry-One
   Botanical & Environmental Sciences- One
   Chemistry- Two
   Food Science & Technology-Three
   GRD School of Planning (Planning Wing)- Two
   Guru Nanak Studies-One
   Hindi -One
   Human Genetics- One
   Sociology- One

Regional Campus, Jalandhar:
   Business Management (MBA Course)- One
   English - One
   Journalism & Mass Communication - One
   Law- One
   School of Legal Studies- Two

Regional Campus, Gurdaspur;
   Law- One

5. **Lecturer-cum-Curator (Zoology)** - One
   (Grade: Rs. 8000-13500)
6. **Lecturer-cum-Asstt. Cytogeneticist (Centre for Genetic Disorders)**-One
   (Grade: Rs. 8000-13500)
7. **Lecturer-cum-Asstt. Geneticist (Centre for Genetic Disorders)** - One
   (Grade: Rs.8000-13500)

Note:

1. Copy of Circular, containing detailed instructions, qualifications, etc. for the posts, will be supplied along with the application form.
2. Score card and the Proforma regarding score card (to be filled in by the candidates for the post of Lecturers and required to be sent along with the application form) will also be supplied along with application form.
3. The candidates are required to apply separately for each post earmarked for each Deptt. / Station.
4. The Candidates who have already applied in response to earlier advertisements during 2003 need not send the fee with the application form.
5. Incomplete applications in any respect or without the prescribed fee or received after the due date will not be entertained.
6. The qualification for all the posts are as per UGC norms.

Amritsar REGISTRAR
January 8, 2004

DIOCESAN SOCIETY EDUCATION'S ROSARY COLLEGE OF COMMERCE & ARTS

Navelim, Salcete, Goa 403 707

Applications with full bio-data are invited for the following post of :

Librarian - 1 Post (Full Time)

On leave vacancy for 2 years

Essential Qualifications :

1. Qualifying in the national-level test conducted for the purpose by the UGC or any other agency approved by the UGC.
2. Master's degree in Library Science / Information Science / Documentation or an equivalent professional degree with at least 55% of the marks or its equivalent grade of B in the UGC seven point scale plus a consistently good academic record, computerization of Library.

Salary : a consolidated sum of Rs. 8000/- p.m.

Terms and conditions : As prescribed by the Goa University, UGC, DHE, Govt. of Goa and other competent authorities.

Applications must be accompanied by certified copies of marksheets of all the examinations from SCC onwards. Those already employed shall forward their applications through proper channel and shall account for break, if any, in their academic career.

Applications should reach the undersigned **within 15 days** from the date of publication of this advertisement.

12/01/2004

Fr. Tony Salema
SECRETARY
Diocesan Society of Education
Bishops House, Altinho, Panaji,
Goa 403 001.

KAVIKULAGURU KALIDAS SANSKRIT UNIVERSITY, (Maharashtra)

Ramtek (Head Office) Baghele Bhavan, Shitalwadi, Mouda Road, Ramtek - 441106, Dist. Nagpur

Nagpur Office : Kasturba Bhavan, Near Dnyaneshwar Temple, Bajaj Nagar, Nagpur

Applications are invited for the post of Dy. Registrar and Security Officer. The last date of submission of filled applications is Wed. 4th Feb.04 up to 4.00 p.m.

Advt. No. 7/KKSU/Admn./Dy
Dt. 31/12/03

Dy. Registrar

No of post - 01(Open)
Age limit for Ext. Candidate - Less than 40 yrs.
Pay Scale - Rs. 10650-15850/-
Educational Qualification - Should have passed degree exam of recognized university.
Experience - Having at least 5 yrs. experience of admn. work/ educational administration on the post of class 1 or class 2
Preference - Candidates with computer course of practical experience of comp. work will be preferred. Knowledge of Marathi is essential.

Advt. No. 8/KKSU/Admn./2003/Sec.
Dt. 26.12.03

Security Officer

No. of posts - 01(Open)
Age limit for Ext. Candidates - Less than 40 yrs.
Pay Scales - Rs. 4500-7000/-

Educational Qualification -

1) Degree of recognized University.
2) Knowledge of Marathi.
3) Should be physically fit and should have passed 'C' certificate exam. of NCC or its equivalent exams or should be ex-serviceman.

Experience - At least 2 yrs. exp. in the field of security or the like

The important conditions for the above posts are as follows:

1) Age limit will not be applicable to the employees working in recognized universities or their affiliated colleges (Retirement limit applicable) **2)** A relaxation of 5 years in the upper age limit will be applicable to backward class candidates (excluding creamylayer/forward class) **3)** Application form Fs. 400/- for Dy registrar and Security officers post (Rs 200/- for backward candidates after producing caste certificate) **4)** Applications can be had from the H.O of the University at Ramtek or Nagpur office for those buying the application with the enclosures should be sent on Ramtek address within the stipulated time. **5)** For both posts, interviews will be held on Friday **13th Feb-2004.**

REGISTRAR

KAVIKULAGURU KALIDAS SANSKRIT UNIVERSITY, (Maharashtra)

Ramtek (Head Office) Baghele Bhavan, Shitalwadi, Mouda Road, Ramtek - 441106, Dist. Nagpur

Nagpur Office : Kasturba Bhavan, Near Dnyaneshwar Temple, Bajaj Nagar, Nagpur

Applications in prescribed form are invited for the Statutory post of Registrar & Finance Officer & Accounts Officer. Forms are available from 5th January 04 at above office.

Advt. No. KKSU/5/03/Admn./Reg./KKSU
Dt. 26/12/03

Registrar - One Post Open

Advt. No. KKSU/6/03/Admn./Reg./KKSU
Dt. 31/12/03

Finance and Accounts Officer' - One Post Open

1) **Qualifications & Experience for Registrar and Finance & Account Officer**

(i) A master's degree with at least 55% of marks or its equivalent grade in B in the UGC Seven point Scale.

- Condition of 55% of marks at master's degree examination is relaxable in case of applicants who are already in the university system.
- A relaxation of 5% from 55% to 50% of the marks at master's degree examination is permissible to the Ph. D. degree holders who have passed their master's degree prior to 19th September, 1991.
- A relaxation of 5% is permissible i.e. from 55% to 50% of the marks at the master's degree exam. for the the candidates belonging to SC/ST category.

(ii) At least 15 years of experience as Lecturer or (Sr. Scale)/ Lecturer with eight years in Selection grade/ Reader's grade alongwith experience in educational administration

OR

Comparable experience in research establishment and / or other institutions of higher education

OR

15 years of administrative experience of which 8 years as deputy registrar or an equivalent post

Pay Scale : 16400-22400/-

2) Proficiency in Marathi.
3) Candidates shall not be less than 45 years of age unless already in service of universities of affiliated colleges
4) Age of superannuation shall be 58 years. However, in the case of person treated at par-with teachers, it shall be 60 years
5) Applictions are invited for the above post in the **Kavikulaguru Kalidas Sanskrit University** so as to reach to undersigned by **4.00 pm** on or before **Wed. 4th Feb. 2004.** Nine copies of the prescribed application form will be supplied on payment of non-refundable fee of Rs. 400/- (Rs. 200/-) in case of backward classes (i.e.) S.C., S.T., & V.J./N.T. on submission of attested true copies of the caste certificates.) payable by **D.D. drawn in favour of Registrar, K.K. Sanskrit University, Ramtek.**
6) The interviews for both the posts will be held on **Saturday 14th Feb. 04.**
7) Other information and instructions will be supplied alongwith application form.

REGISTRAR

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NORTH EASTERN HILL UNIVERSITY
PERMANENT CAMPUS, MAWKYNROH
UMSHING : SHILLONG - 793 022

No. F.I-4/Estt-II(B)2000(Pt.)-52 **Dated the 9th January, 2004.**

EMPLOYMENT NOTICE

Applications on the prescribed form are invited from the Indian Nationals possessing qualifications and experience as stipulated by the U.G.C. for filling up the following faculty positions of the University. The vacancy position is shown against each department within bracket.

1. SHILLONG CAMPUS

(a) PROFESSOR History (1). Philosophy (1) Botany (2), Mathematics (1), Library Science (1), Geography (1), Sociology (1), Khasi (1), Commerce (2), RS1C (I), Center for Applied Statistics (1), Bio-Technology (1), Bio-Informatics (1), Economics (2), Law (1), Statistics (1), Physics (1).

(b) READER Anthropology (1), History (2), Zoology (4), English (2). Creative Arts (2), Education (1), Chemistry (3), Continuing Education (1), Mathematics (4), Sociology (I), Linguistics (I), Centre for Applied Statistics (1), Law (1), Physics (2).

(c) LECTURER English (1, SC), Creative Arts (I, PH.), Education (3-1 P.H., 1 SC/ST, 1 open), Chemistry (1 SC), Philosophy (1), Library Science (1). Political Science (2), Geography (1). Commerce (1), Bio-Technology (1). Bio-Informatics (1), Statistics (1), Law (3).

II. TURA CAMPUS

(a) PROFESSOR Education (1), Rural Development & Agri. Production (1).

(b) READER Education (1), Garo (2).

HOW TO APPLY: For further details and for the prescribed application forms, the Section Officer, Estt. II (B) Section in the Permanent Campus of the University at Mawkynroh, Umshing, Shillong - 793022 **MAY BE CONTACTED.** Application forms and detailed information will be available on submission of a Bank Draft/Banker's Cheque for **Rs. 20/- (Rupees Twenty)** only drawn in favour of Finance Officer, NEHU, Shillong and payable at S.B.I. NEHU Branch (Code No. 4295) or the counterfoil of the Challan depositing the cash at S.B.I., NEHU Branch only along with a self-addressed stamped envelope (23 X 10 cm).

Candidates, who have responded to the Advt. No. F.1-4/Estt.II(B)/2000-2084, dt. 27th November, 2002 in respect of the following posts and fulfill the criteria laid down in this advt. need not apply again.

(a) Professor - Commerce, Mathematics, History and RSIC.
(b) Reader - Anthropology, Creative Arts and Continuing Education.
(c) Lecturer - Education and Creative Arts, Political Science.

LAST DATE : (i) Last date for issue of application form is on **09-02-2004.**
(ii) Last date for receipt of the filled in application form is on **26-02-2004.**

Sd/-
(D.T. KHATHING)
REGISTRAR

Published by Dr. Sistla Rama Devi Pani, on behalf of the Association of Indian Universities, AIU House, 16 Comrade Indrajit Gupta Marg (Kotla Marg), New Delhi-110 002. Grams: ASINDU. Phones: 23230059, 23232429. Fax: 011-23232131. E-Mail : aiu@del2.vsnl.net.in, Website : http://www.aiuweb.org